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SOUTHWEST INTERTIE PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT

DRAFT PLAN AMENDMENT

Map Volume

Prepared by the:

U.S. Department of the Interior
Bureau of Land Management
Burley, Shoshone, and Boise District Offices, Idaho
Elko, Ely, and Las Vegas District Offices, Nevada
Richfield District Office, Utah

In Cooperation with:

U.S. Department of Agriculture
Forest Service
Intermountain Region, R-4

U.S. Department of Interior
National Park Service
Pacific Northwest, Rocky Mountain,
and Western Regions

U.S. Department of Interior
Bureau of Indian Affairs
Cedar City, Utah

U.S. Department of Interior
Bureau of Reclamation
Pacific Northwest, Upper Colorado
and Lower Colorado Regions

June 1992

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MAPS AND MAP INDEX

The Map Volume includes eight map sets for the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan Amendment (DEIS/DPA) illustrating the following information:

Alternative Routes

- Environmentally Preferred Route, Utility Preferred Route, Agency Preferred Route, and the other alternative routes
- substation and series compensation station siting areas and alternative sites
- alternative microwave sites and communication paths

Earth Resources

- potential impacts to soil and water resources along the centerline
- areas of high potential for soil erosion by water and wind, prime/unique farmlands, and water resources (e.g., rivers, streams, lakes, etc.) within one-half mile of alternatives routes

Biological Resources

- potential impacts to wildlife and botanical resources along the centerline
- sensitivity of wildlife/botanical species and/or habitat to ground disturbance and increased public access within one mile of alternative routes

Land Use Resources

- potential impacts to land uses along the centerline
- inventory of existing and planned land uses, and parks and recreation, and preservation areas within three miles of alternative routes

Visual Resources

- potential impacts to views from residences, highways and roads, parks and recreation sites, and certain historic sites along the centerline
- sensitivity of viewpoints to adverse visual effects within three miles of alternative routes

Jurisdiction

- land owner or administrator for lands crossed by alternative routes

Landcover

- vegetation cover (e.g., sage scrub) or other surface (e.g., basaltic flow) crossed by alternative routes

Cultural Resources

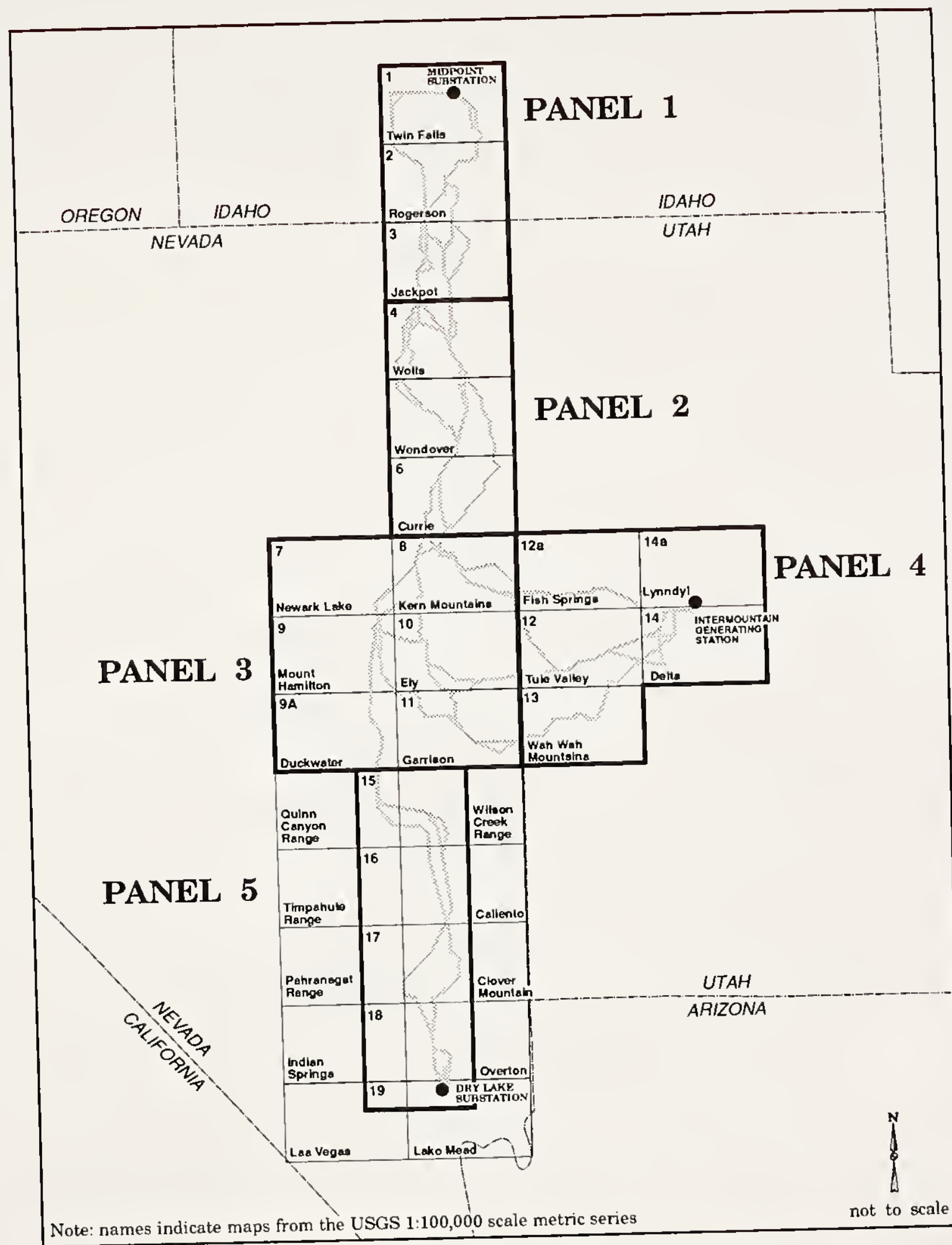
- potential impacts to known prehistoric, ethnohistoric, and historic sites as well as impacts expected to occur in areas of predicted high sensitivity from ground disturbance and increased public access along the centerline.
- sensitivity of cultural resources within one mile of alternative routes

Because there are over 2,000 miles of alternatives, it was necessary to divide the project area into five "panels". Each panel is composed of several 1:100,000 USGS metric series topographic maps reduced to approximately 1:250,000 scale for the Map Volume. The panels and the corresponding USGS topographic maps are shown on the Map Index.

READING THE MAPS

The color of the centerline indicates potential impacts (e.g., red=high, blue=moderate, etc.) for the resources represented on the map. On some maps, the color information within the study corridors represents a particular resource's sensitivity to potential effects of the SWIP. On others, the color represents a combination of both the resource feature and its sensitivity. For each of the map title listed below, there are five maps, one for each panel.

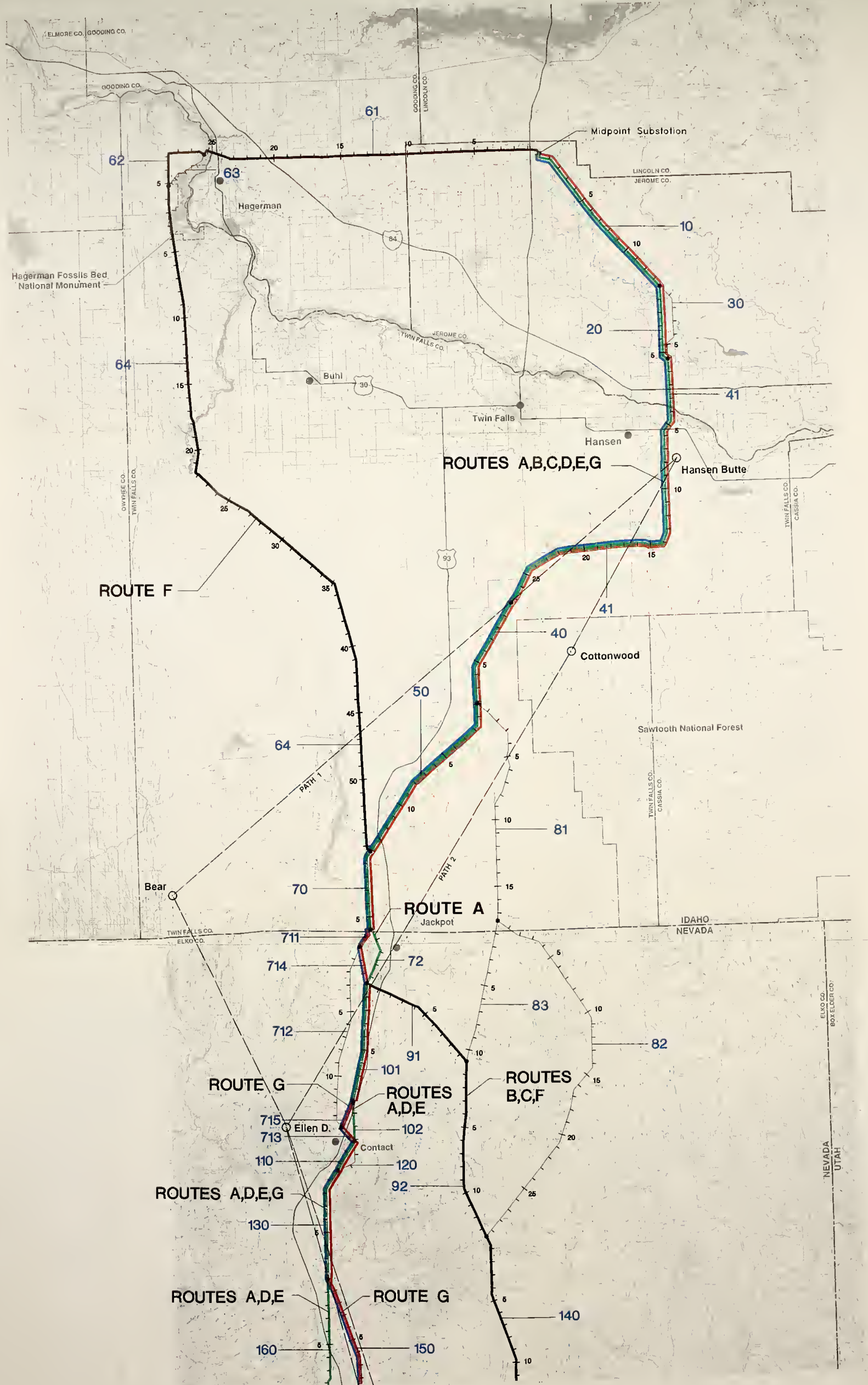
The marks indicating mileposts along the centerline of each alternative are in increments of one mile. These mileposts correspond to the mileposts listed in the Data Tables (refer to Appendix H of the DEIS/DPA for locations where the technical reports and Data Tables can be reviewed).



Map Index



ROUTE ALTERNATIVES



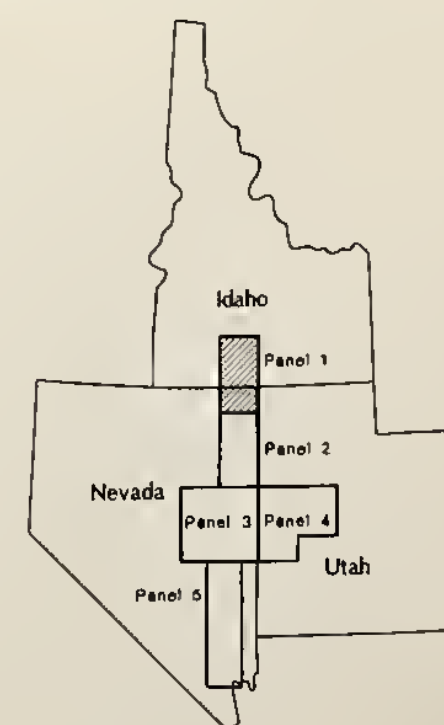
ALTERNATIVE ROUTES

- Environmentally Preferred Route
- Utility Preferred Route
- Agency Preferred Route
- Alternative Routes
- Other routing alternatives studied
- Substation and Series Compensation Station Siting Areas
- Alternative Substation Sites
- Alternative Microwave Facilities Sites
- Communication Path Alternatives

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek, & Jackpot

Map prepared by Damos & Moore

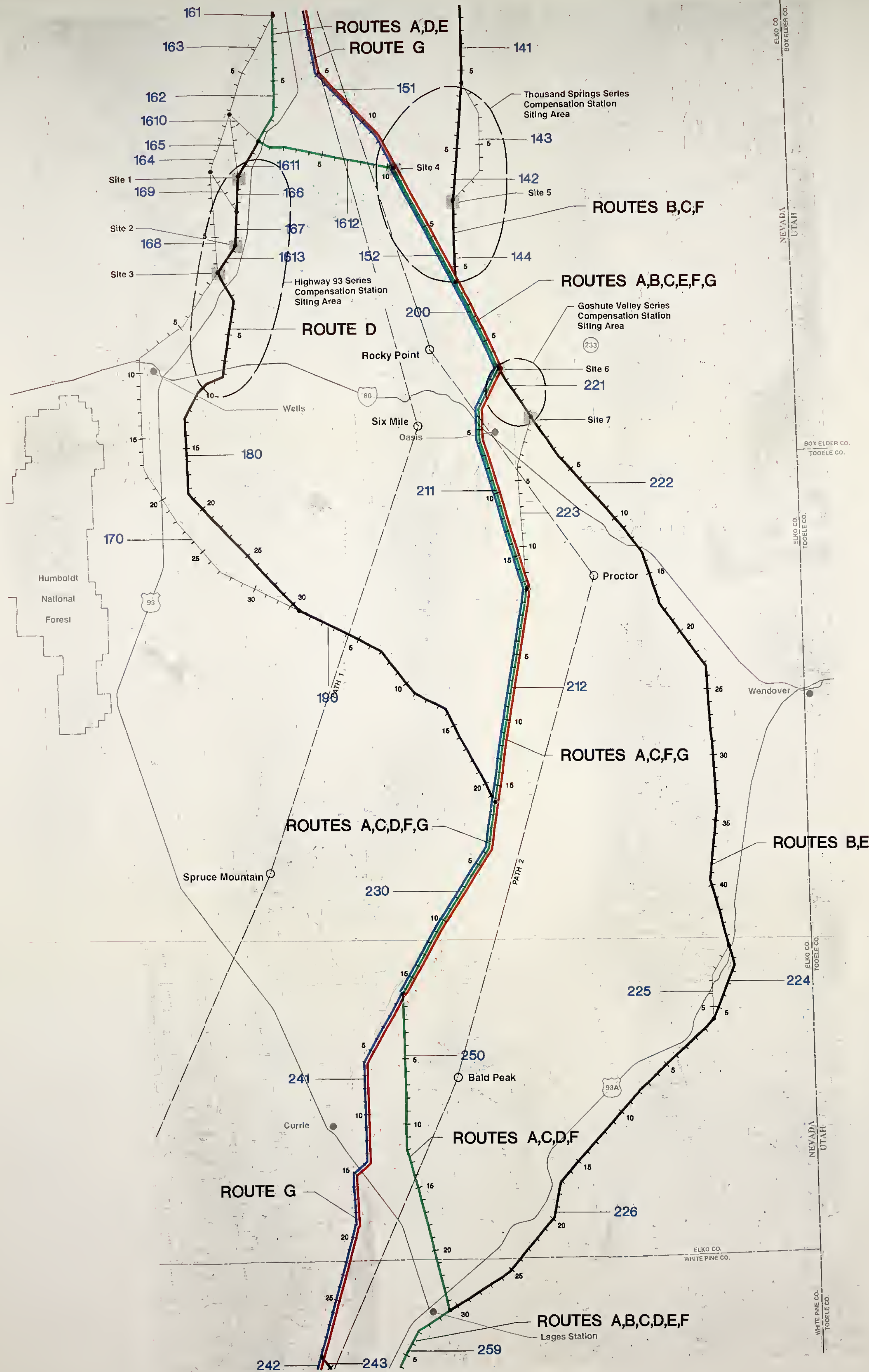


Panel 1 - Alternative Routes

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles



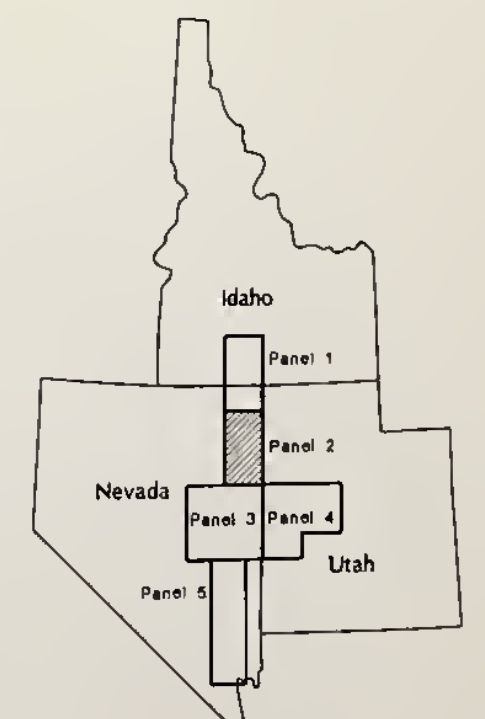
ALTERNATIVE ROUTES

- Environmentally Preferred Route
- Utility Preferred Route
- Agency Preferred Route
- Alternative Routes
- Other routing alternatives studied
- Substation and Series Compensation Station Siting Areas
- Alternative Substation Sites
- Alternative Microwave Facilities Sites
- Communication Path Alternatives

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wendover, Elko, & Currie

Map prepared by Oames & Moore

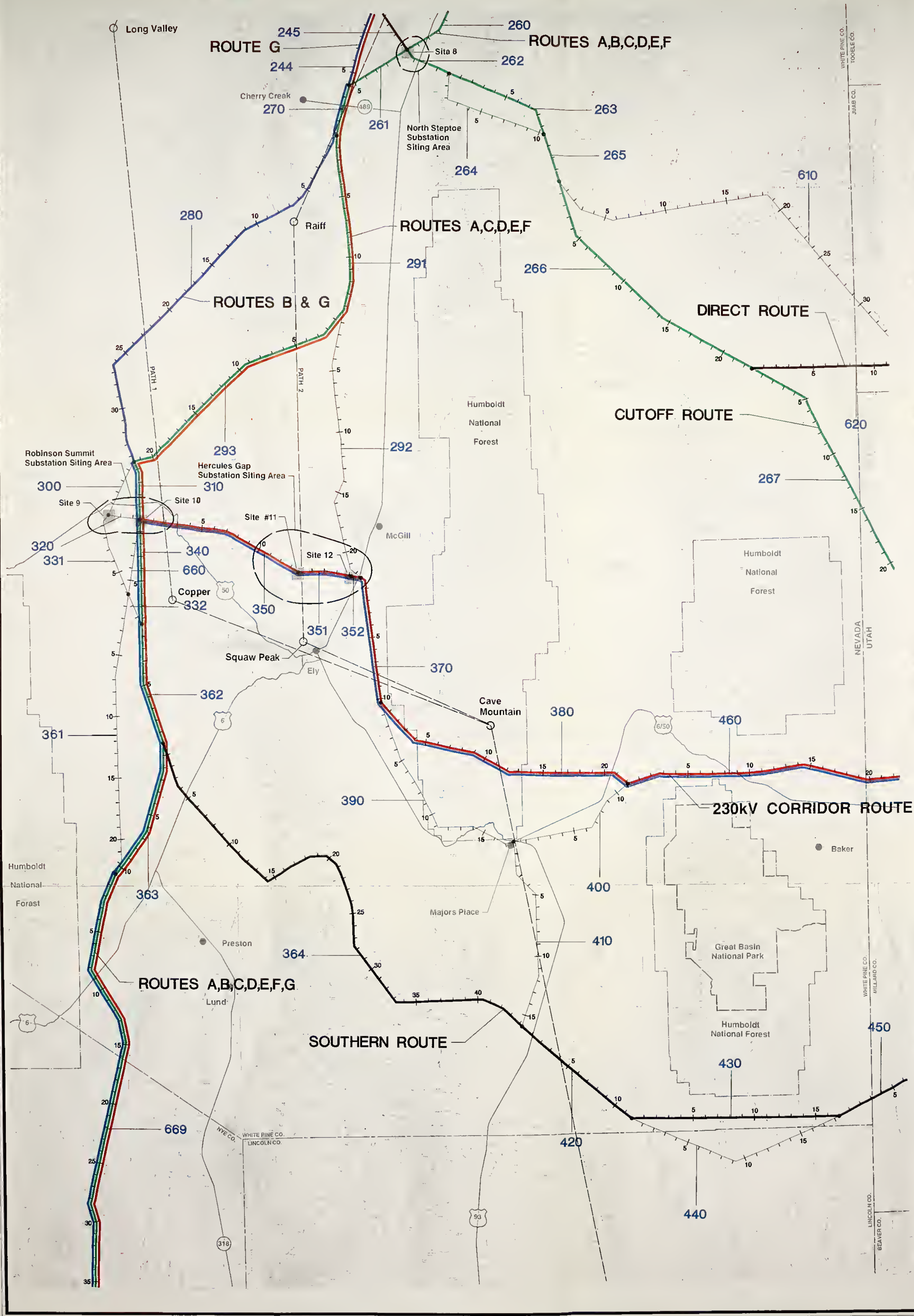


Panel 2 - Alternative Routes

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



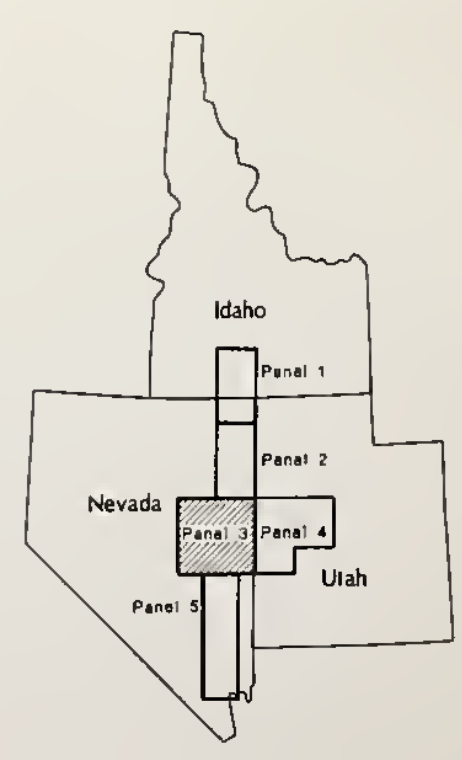
ALTERNATIVE ROUTES

- Environmentally Preferred Route
- Utility Preferred Route
- Agency Preferred Route
- Alternative Routes
- Other routing alternatives studied
- Substation and Series Compensation Station Siting Areas
- Alternative Substation Sites
- Alternative Microwave Facilities Sites
- Communication Path Alternatives

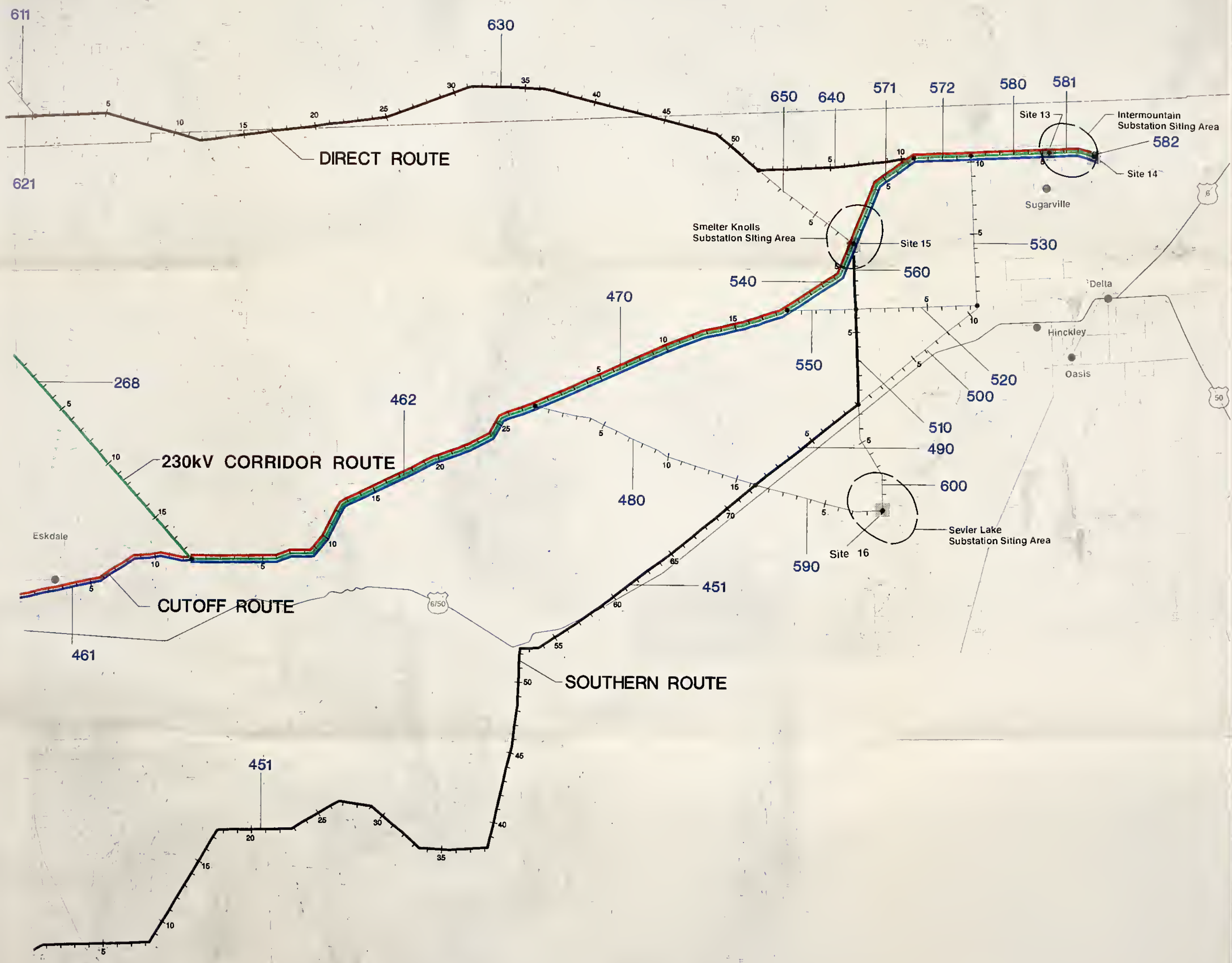
70 Link number
O Junction
15 Milepost
County boundary
State boundary
Forest Service boundary
City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Newark Lake, Korn Mountains, Mount Hamilton,
Ely, Duckwater, & Garrison

Map prepared by Dames & Moore



Panel 3 - Alternative Routes



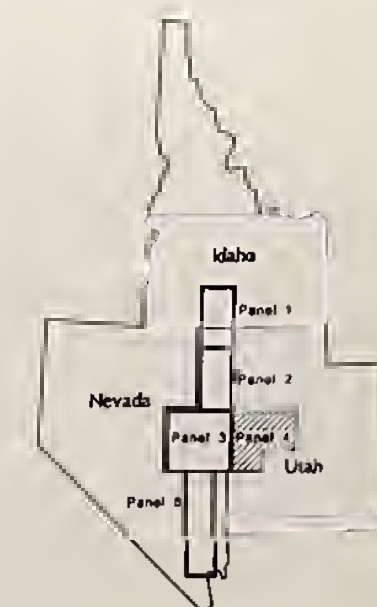
ALTERNATIVE ROUTES

- Environmentally Preferred Route
- Utility Preferred Route
- Agency Preferred Route
- Alternative Routes
- Other routing alternatives studied
- Substation and Series Compensation Station Siting Areas
- Alternative Substation Sites
- Alternative Microwave Facilities Sites
- Communication Path Alternatives

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lynndyl, Tule Valley, Delta,
& Weh Weh Mountains North

Map prepared by Dames & Moore



Panel 4 - Alternative Routes

SOUTHWEST INTERTIE PROJECT










Scale 1:250,000

0 5 10 miles

MILLARD CO.
BEAVER CO.

MILLARD CO.
BEAVER CO.

ALTERNATIVE ROUTES

-  Environmentally Preferred Route
-  Utility Preferred Route
-  Agency Preferred Route
-  Alternative Routes
-  Other routing alternatives studied
-  Substation and Series Compensation Station Siting Areas
-  Alternative Substation Sites
-  Alternative Microwave Facilities Sites
-  Communication Path Alternatives



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps

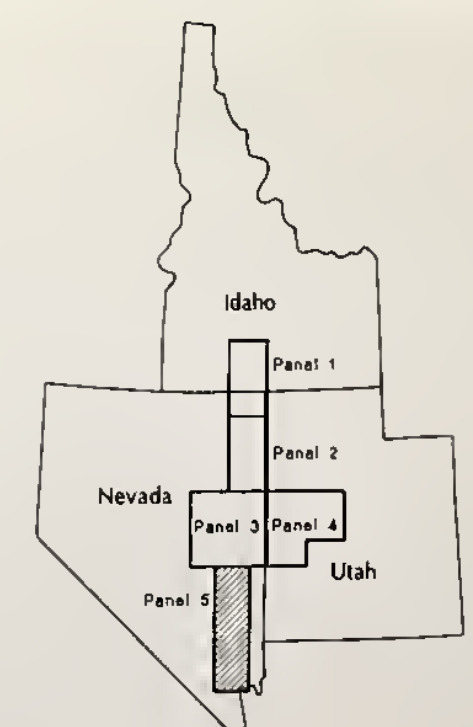


Routes A,B,C,D,E,F,G

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Quinn Canyon Range, Wilson Creek Range, Timpahute Range, Callente, Pahrangat Range, Clover Mountain, Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Dames & Moore



Panel 5 - Alternative Routes

**SOUTHWEST
INTERTIE
PROJECT**

Scale 1:250,000

0 5 10 miles



EARTH RESOURCES

EARTH RESOURCES

IMPACT LEVEL

- High
- Moderate
- Low

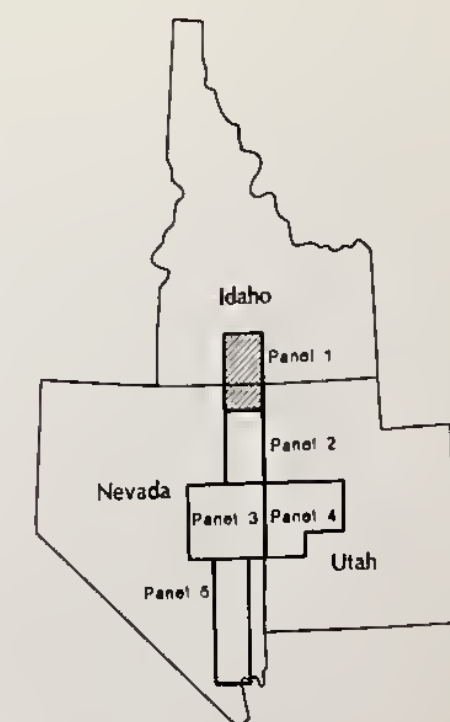
SENSITIVE RESOURCES

- High Water Erosion Potential
- High Wind Erosion Potential
- Prime/unique farmland
- River, Perennial Streams, & Canals
- Lakes & Reservoirs
- Wetlands
- Springs

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek, & Jackpot

Map prepared by Demos & Moore

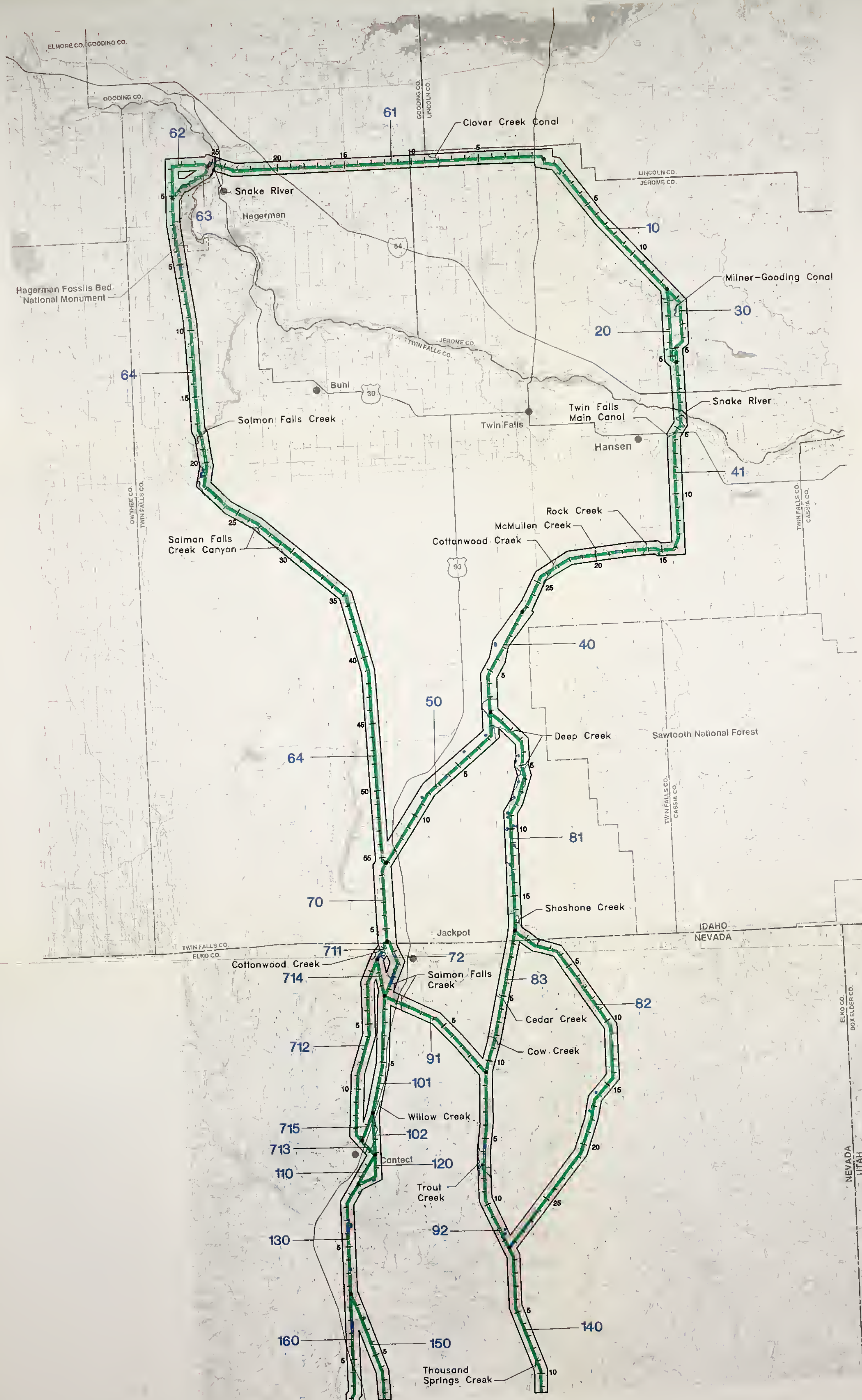


Panel 1 - Earth Resources

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles

















EARTH RESOURCES

IMPACT LEVEL

-  High
-  Moderate
-  Low

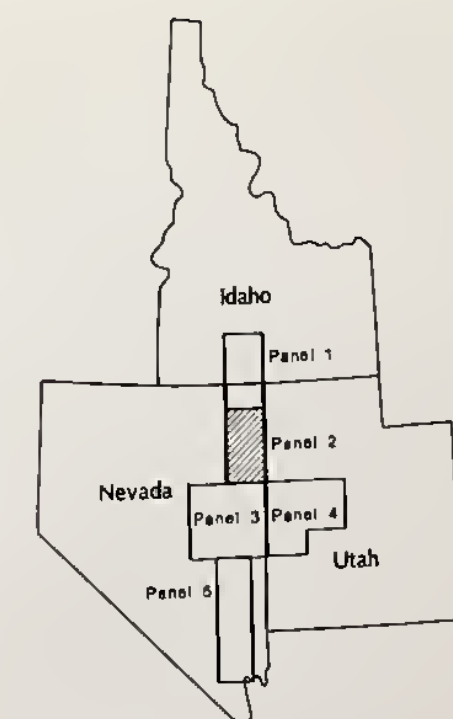
SENSITIVE RESOURCES

-  High Water Erosion Potential
-  High Wind Erosion Potential
-  Prime/unique farmland
-  River, Perennial Streams, & Canals
-  Lakes & Reservoirs
-  Wetlands
-  Springs

-  70 Link number
-  Junction
-  15 Milepost
-  County boundary
-  State boundary
-  Forest Service boundary
-  City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wendover, Elko, & Currie

Map prepared by Dames & Moore

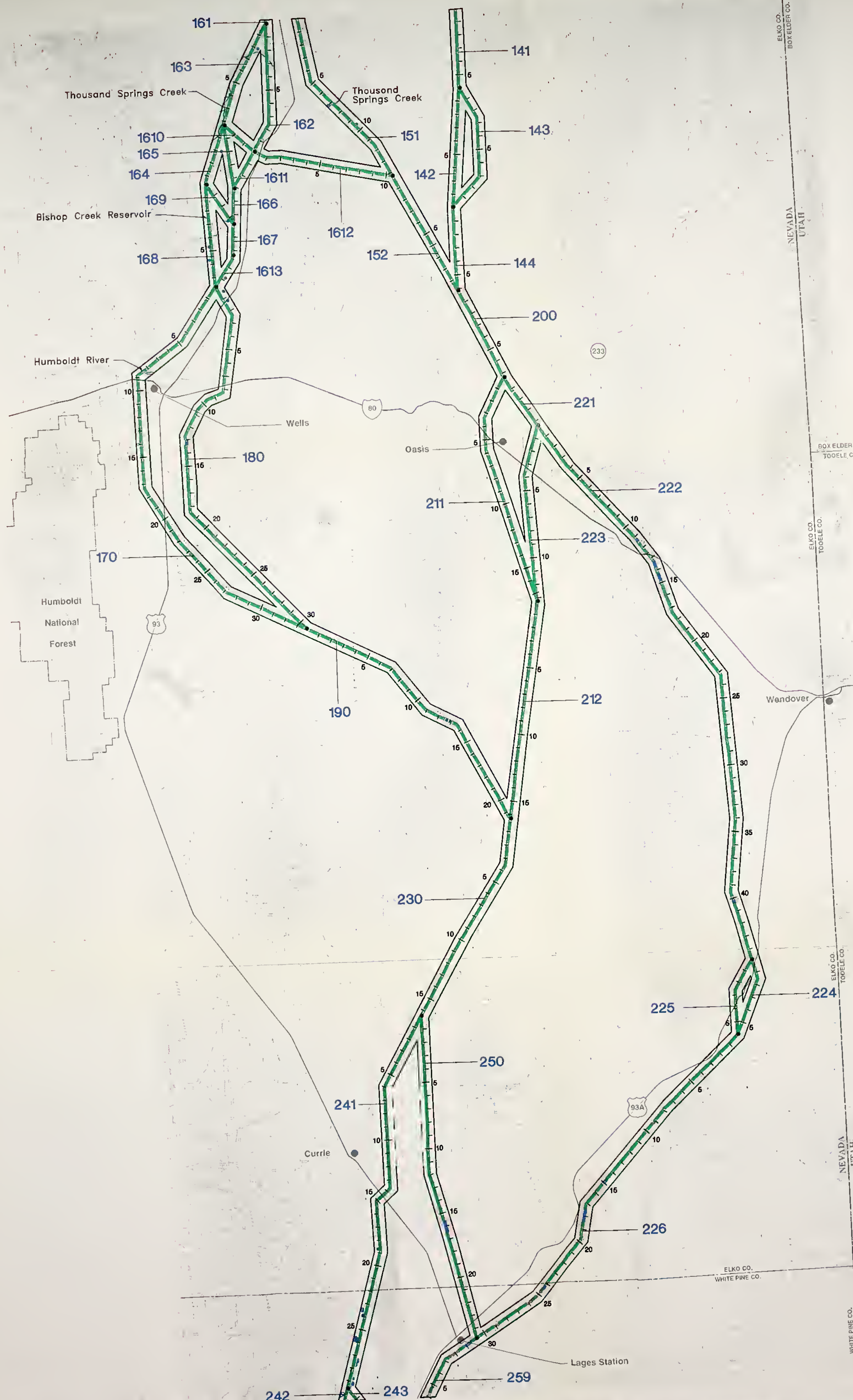


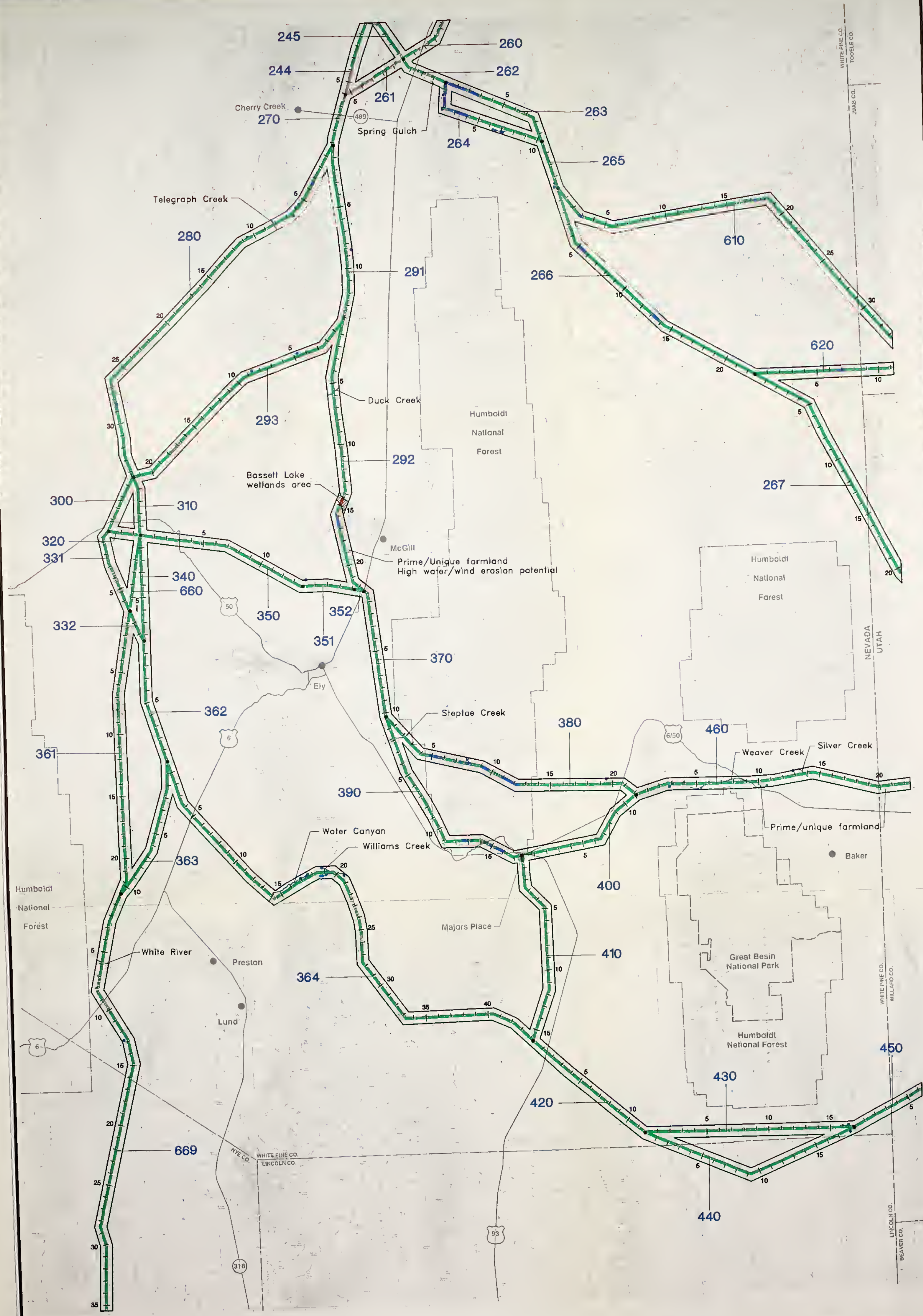
Panel 2 - Earth Resources

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles





EARTH RESOURCES

IMPACT LEVEL

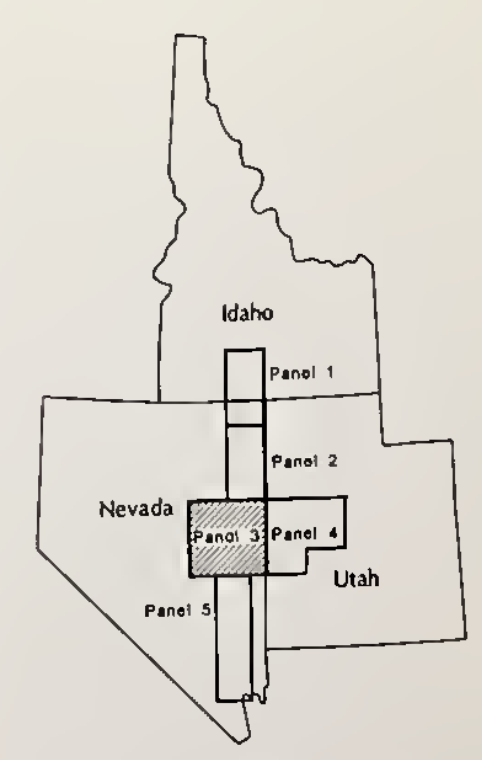
- High
- Moderate
- Low

SENSITIVE RESOURCES

- High Water Erosion Potential
- High Wind Erosion Potential
- Prime/unique farmland
- River, Perennial Streams, & Canals
- Lakes & Reservoirs
- Wetlands
- Springs

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Newark Lake, Kern Mountains, Mount Hamilton,
 Ely, Duckwater, & Garrison
 Map prepared by Dames & Moore

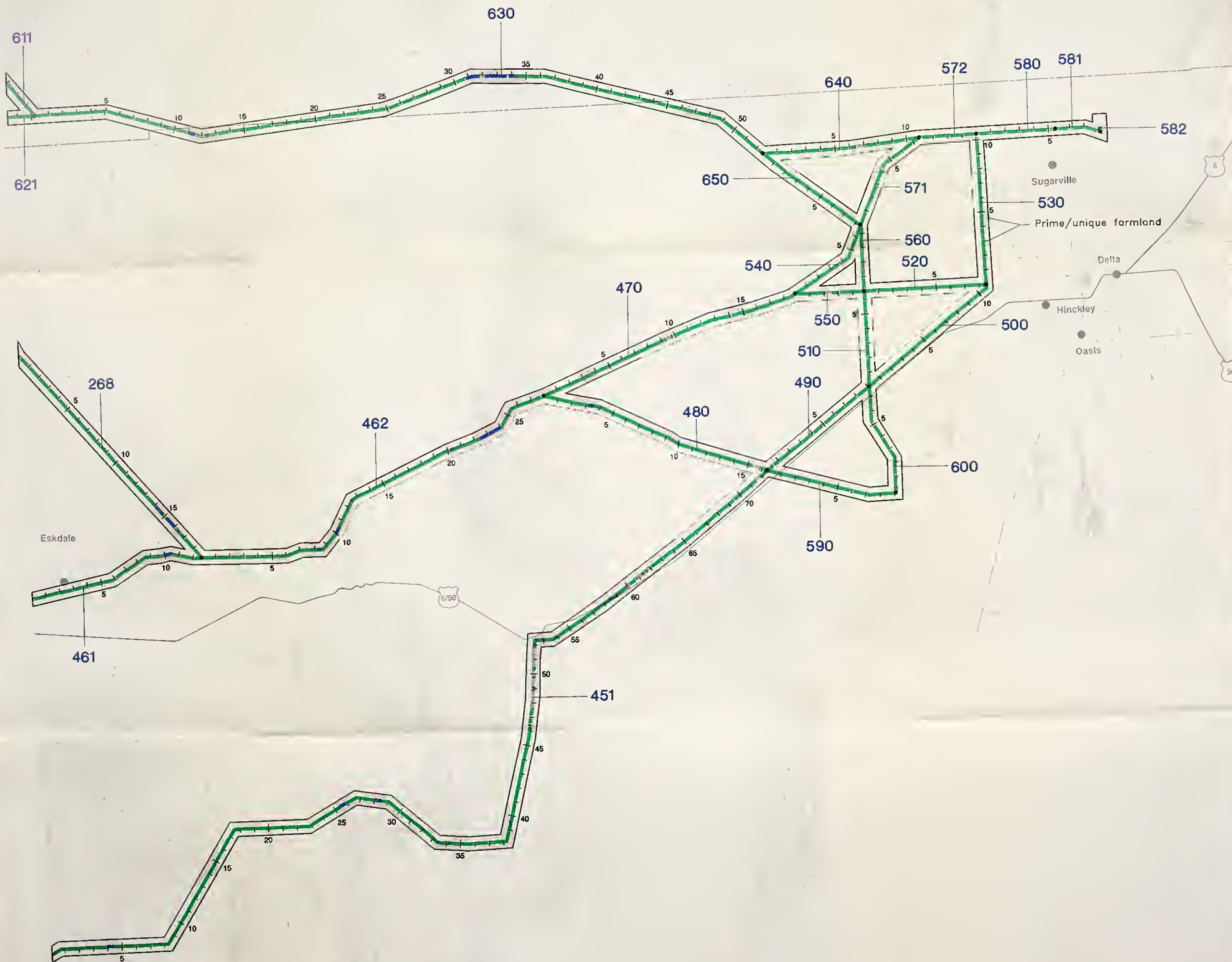


Panel 3 - Earth Resources

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles



EARTH RESOURCES

IMPACT LEVEL

- High
- Moderate
- Low

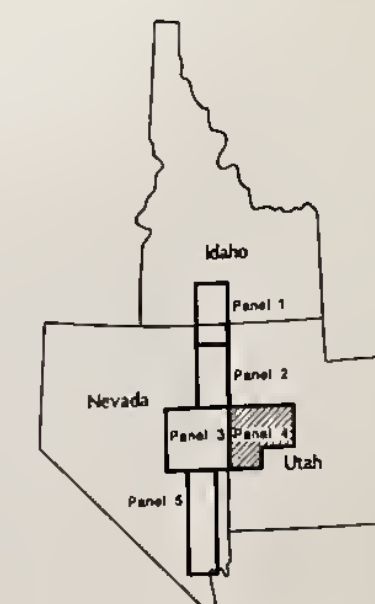
SENSITIVE RESOURCES

- High Water Erosion Potential
- High Wind Erosion Potential
- Prime/unique farmland
- River, Perennial Streams, & Canals
- Lakes & Reservoirs
- Wetlands
- Springs

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lynndyl, Tule Valley, Delta,
& Wah Wah Mountains North

Map prepared by Dames & Moore

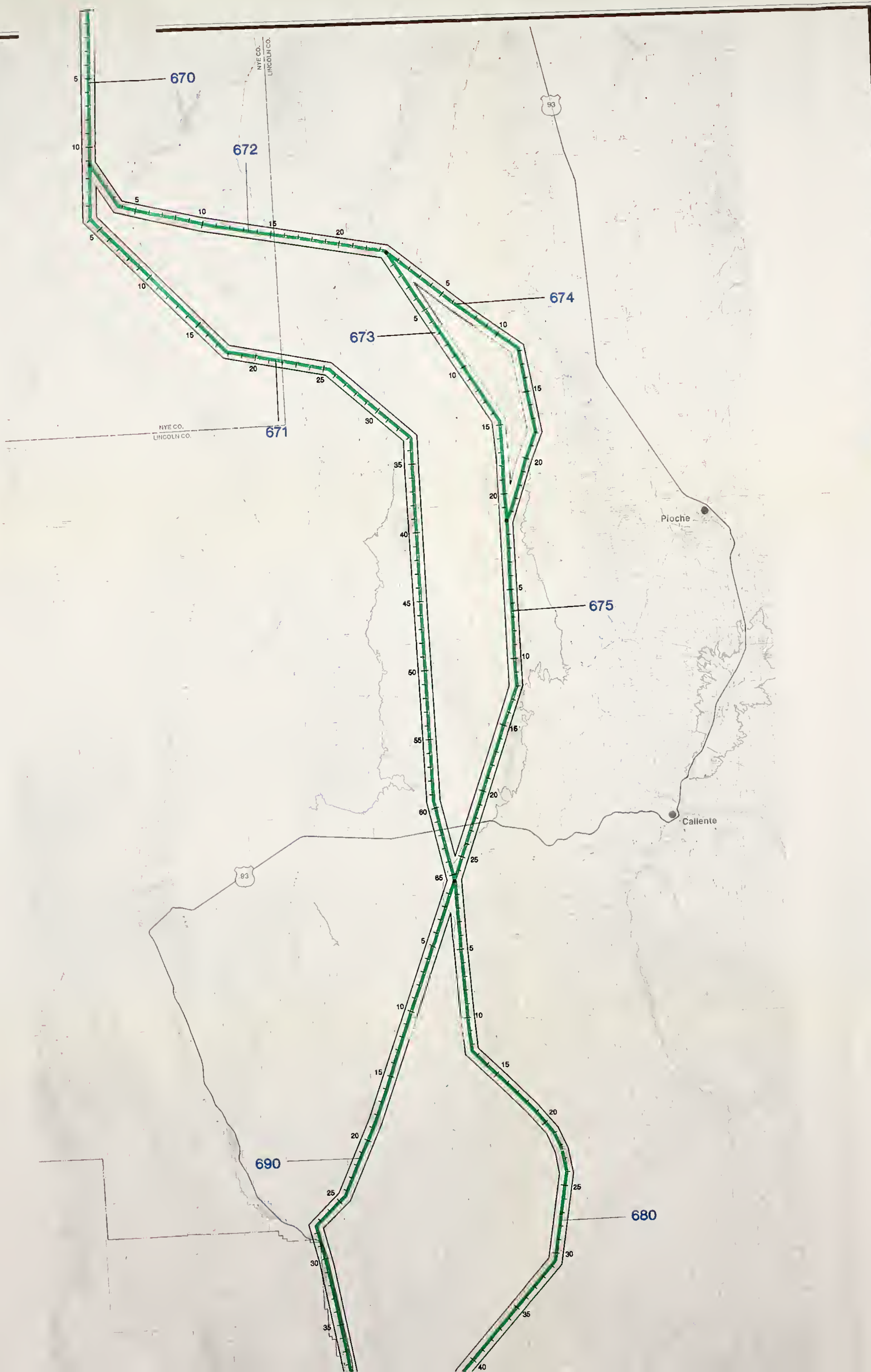


Panel 4 - Earth Resources

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



EARTH RESOURCES

IMPACT LEVEL

- High
- Moderate
- Low

SENSITIVE RESOURCES

- High Water Erosion Potential
- High Wind Erosion Potential
- Prime/unique farmland
- River, Perennial Streams, & Canals
- Lakes & Reservoirs
- Wetlands
- Springs



BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

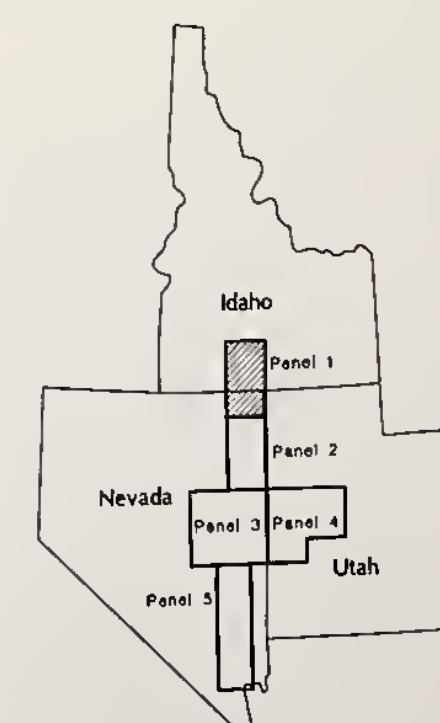
SENSITIVE RESOURCES

- High/Moderate
- Moderate/Low
- Background

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek,
& Jackpot

Map prepared by Dames & Moore

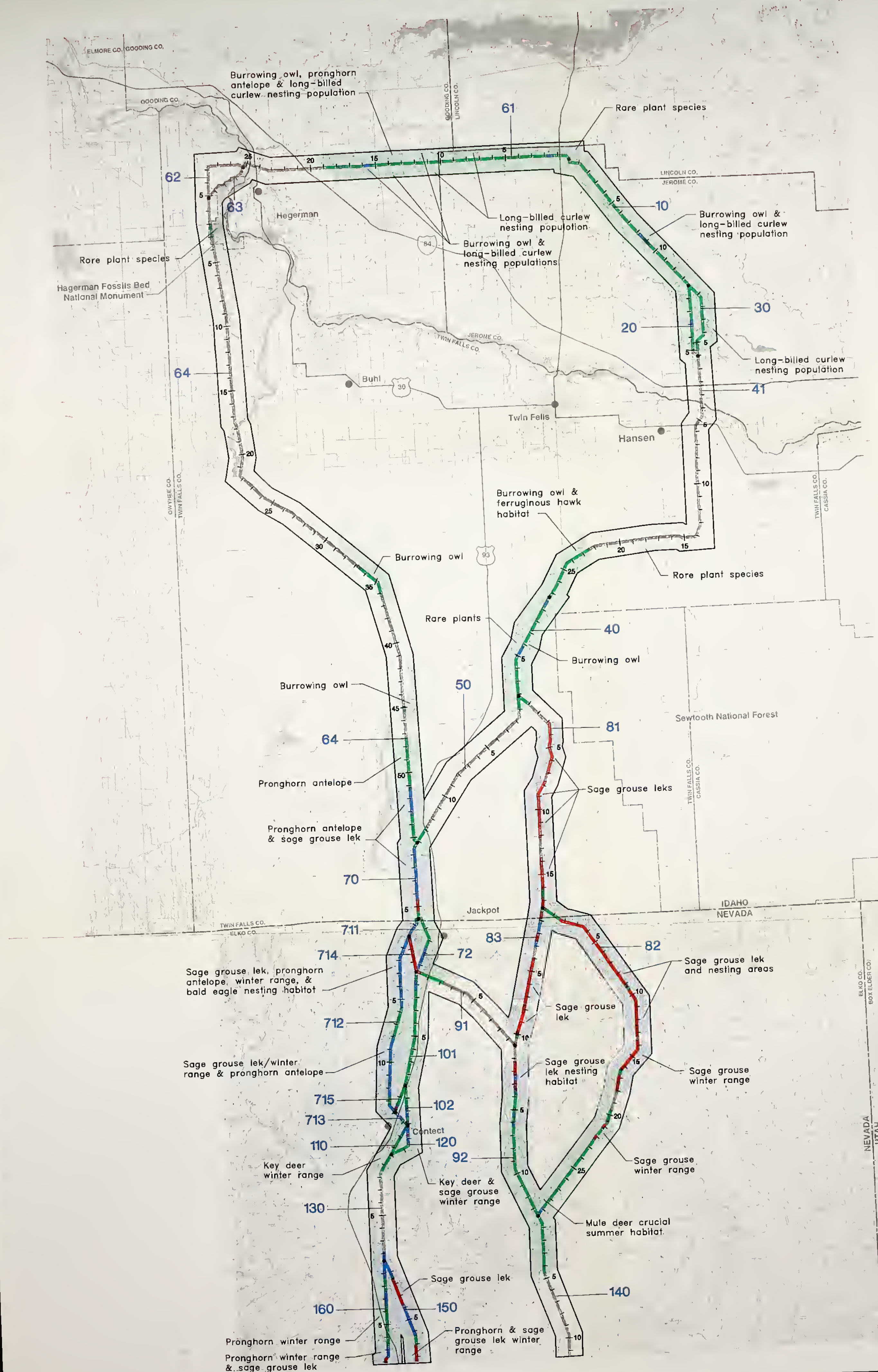


Panel 1 - Biological Resources

SOUTHWEST INTER-TIE PROJECT

Scale 1:250,000

0 5 10 miles



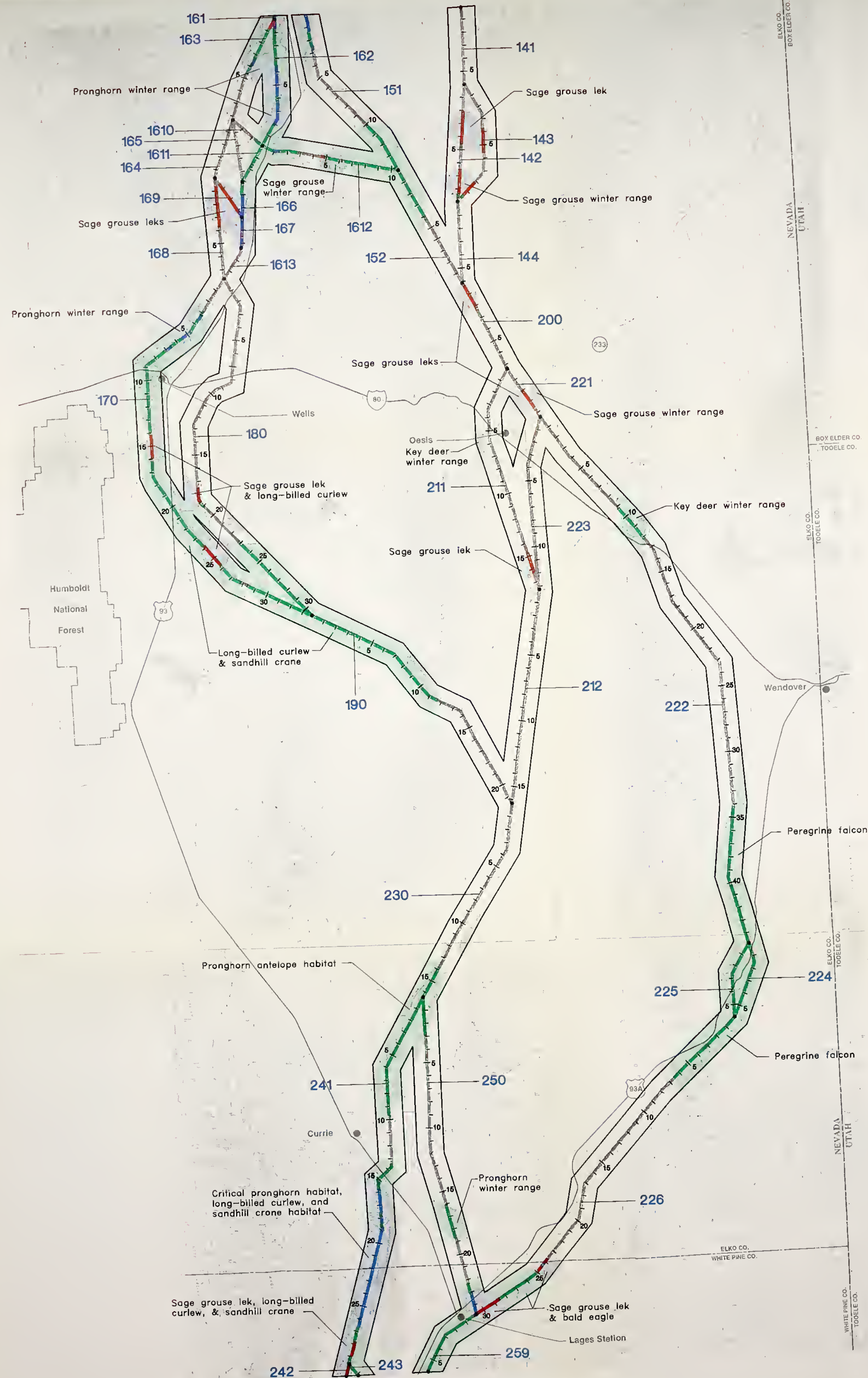
BIOLOGICAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

SENSITIVE RESOURCES

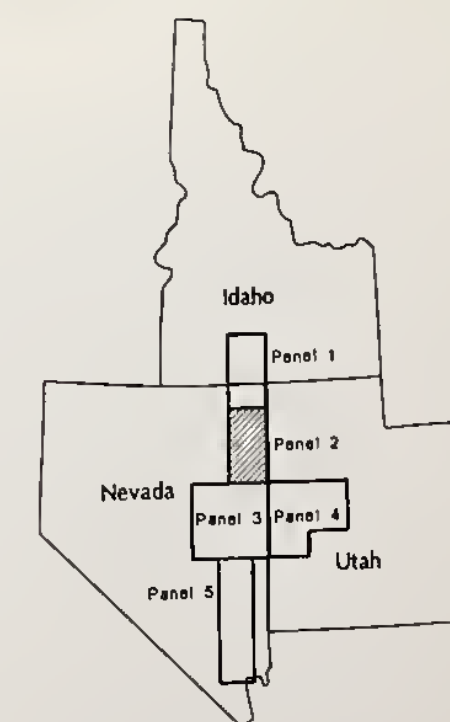
- High/Moderate
- Moderate/Low
- Background



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wendover, Elko, & Currie

Map prepared by Dames & Moore



Panel 2 - Biological Resources

**SOUTHWEST
INTER TIE
PROJECT**

Scale 1:250,000

0 5 10 miles



BIOLOGICAL RESOURCES

IMPACT LEVELS

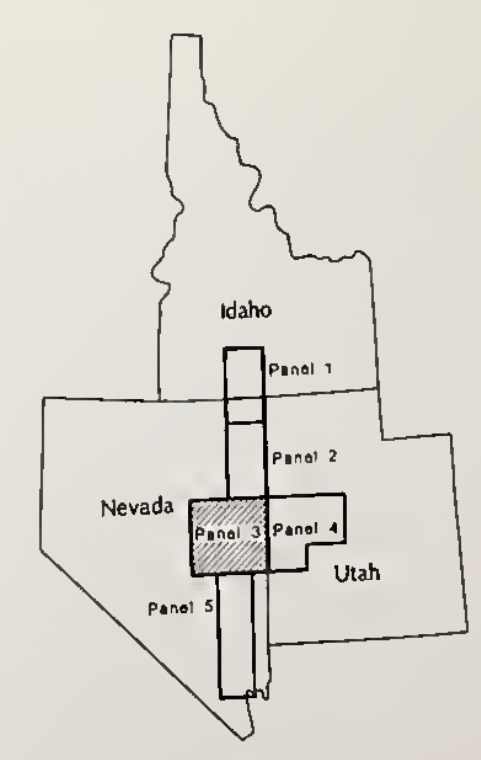
- High
- Moderate
- Low

SENSITIVE RESOURCES

- High/Moderate
- Moderate/Low
- Background

- 70 Link number
- Junction
- 12 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Newark Lake, Kern Mountains, Mount Hamilton,
 Ely, Duckwater, & Garrison
 Map prepared by Dames & Moore



Panel 3 - Biological Resources

BIOLOGICAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

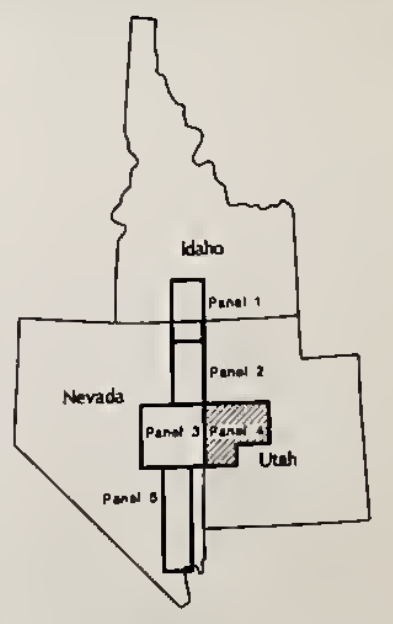
SENSITIVE RESOURCES

- High/Moderate
- Moderate/Low
- Background

- 70 Link number
- 15 Milepost
- State boundary
- Forest Service boundary
- City, town, or community
- County boundary

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lynndyl, Tule Valley, Delta,
& Wah Wah Mountains North

Map prepared by Dames & Moore

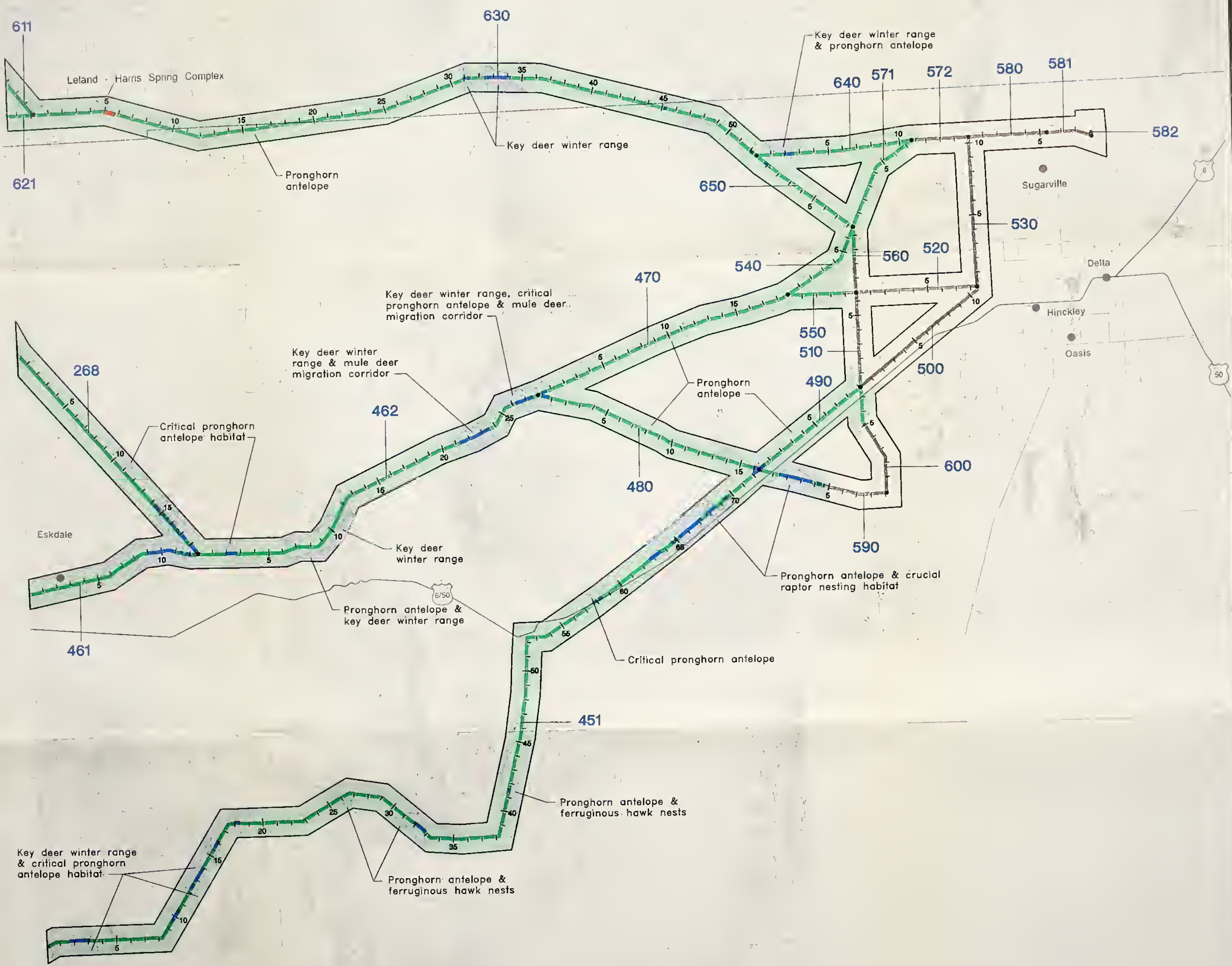


Panel 4 - Biological Resources

SOUTHWEST INTER Tie PROJECT

Scale 1:250,000

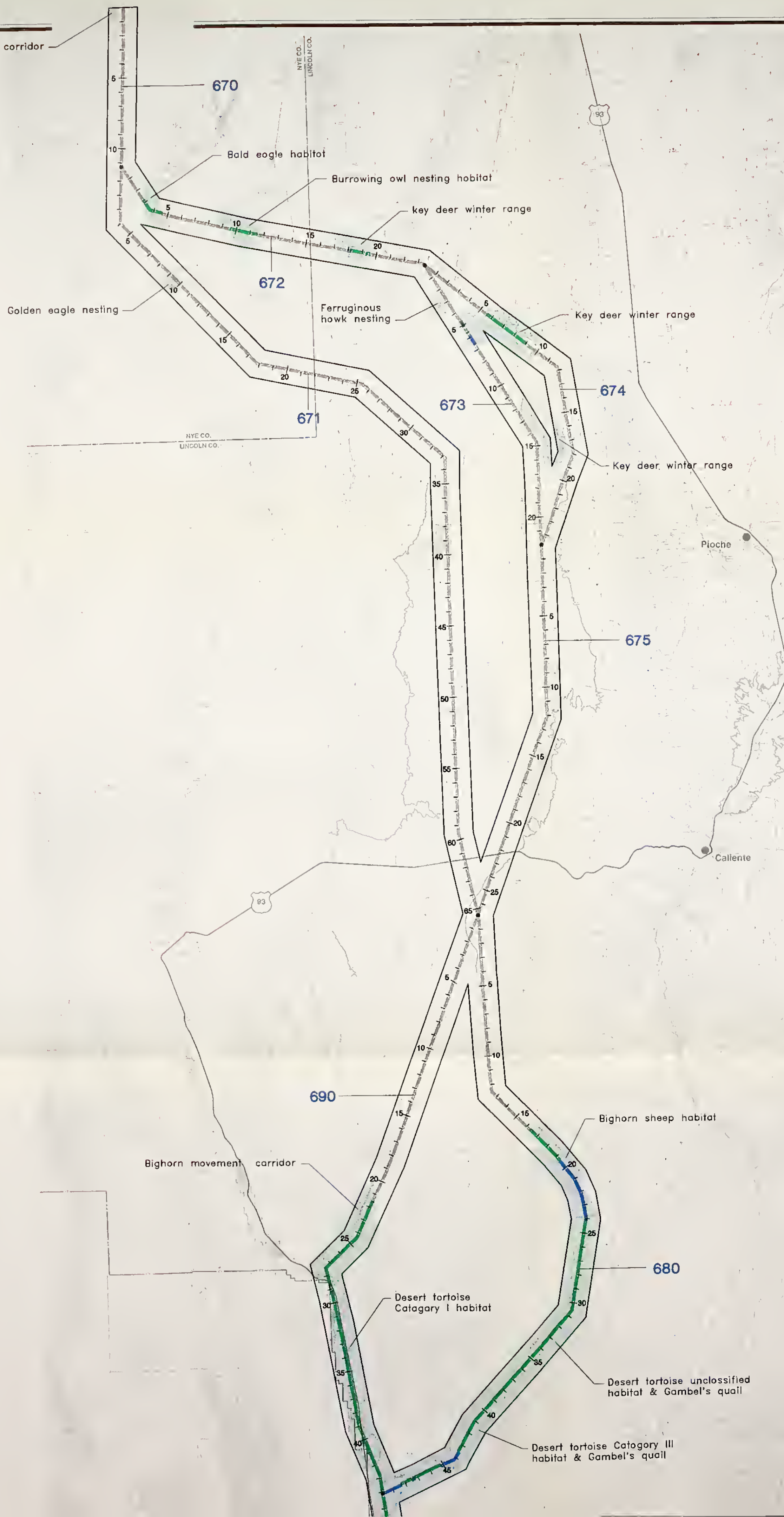
0 5 10 miles



MILLARD CO.
BEAVER CO.

MILLARD CO.
BEAVER CO.

Mule deer migration corridor



BIOLOGICAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

SENSITIVE RESOURCES

- High/Moderate
- Moderate/Low
- Background

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

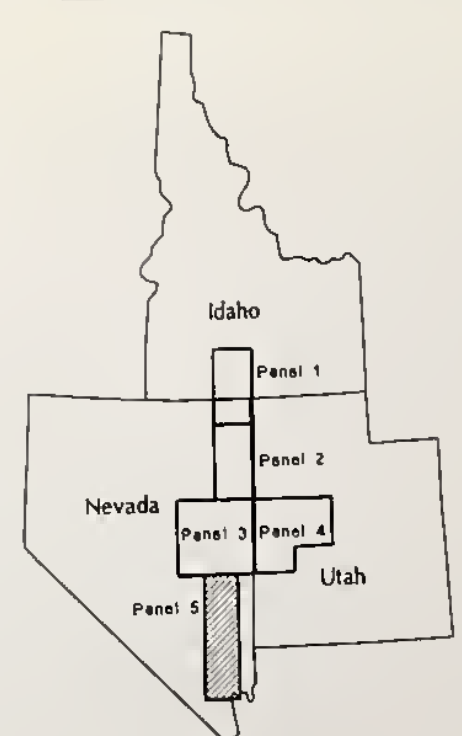
Source: USGS 1:100,000 metric series topographic maps
Quinn Canyon Range, Wilson Creek Range, Timpahute



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Quinn Canyon Range, Wilson Creek Range, Timpanoh Range, Callente, Pahrengat Range, Clover Mountain Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Dames & Moore

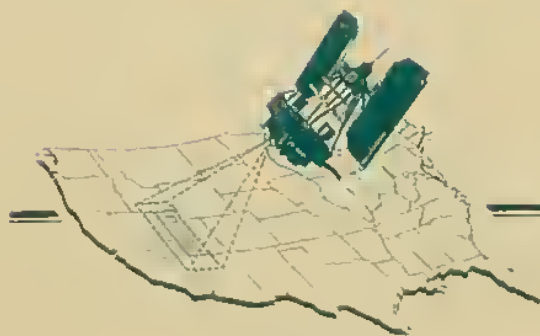


Panel 5 - Biological Resources

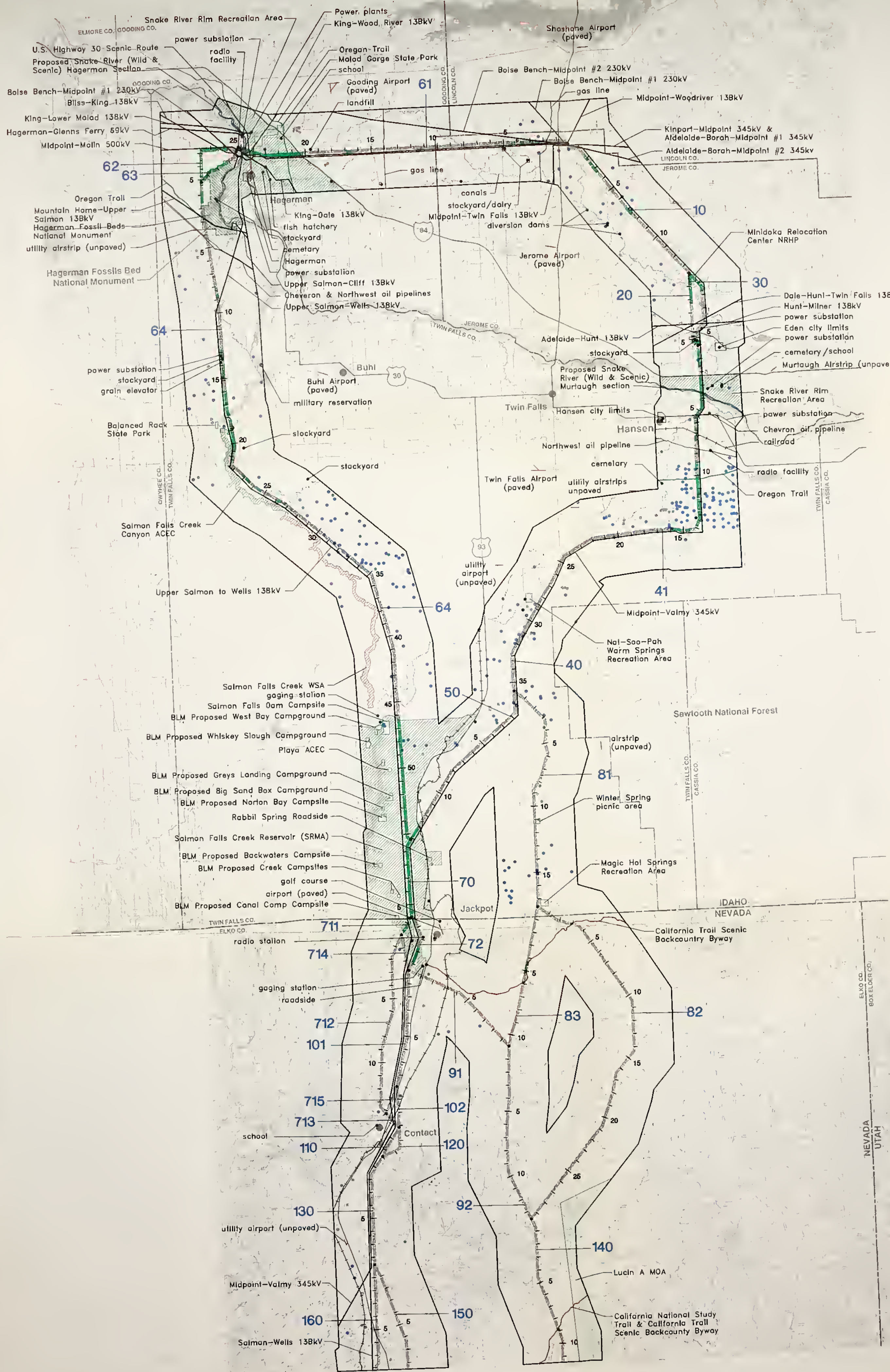
**SOUTHWEST
INTER-TIE
PROJECT**

Scale 1:250,000

0 5 10 miles



LAND USE RESOURCES



LAND USE RESOURCES

IMPACT LEVEL

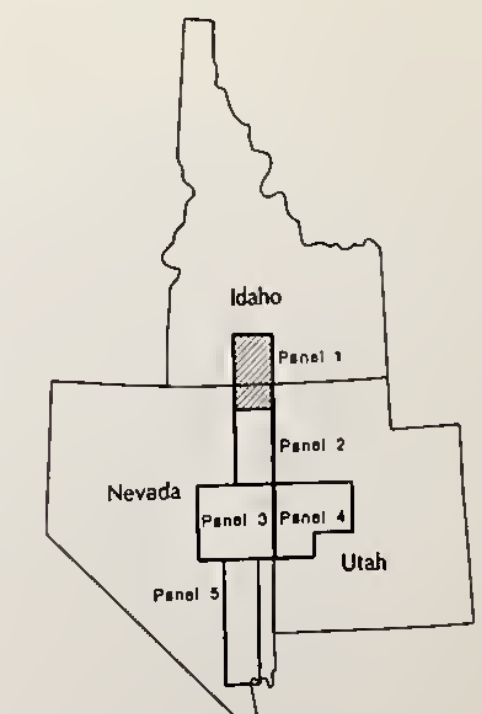
- High
- Moderate
- Low

RESOURCE FEATURE

- Wilderness Study Areas
- Special Management Areas
- National Parks & Monuments
- Wildlife Refuges & Management Areas
- Parks & Recreation
- Scenic Highways & Byways
- Trails
- Military Operating Areas
- Restricted Air Space
- Transmission Line
- Pipelines
- Railroads
- Canals
- Wells & Tanks
- Gravel Pits & Borrow Areas
- Corrals
- Airstrips

- 70 Link number
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek, & Jackpot
Map prepared by Dames & Moore



Panel 1 - Land Use Resources

LAND USE RESOURCES

IMPACT LEVEL

- High
- Moderate
- Low

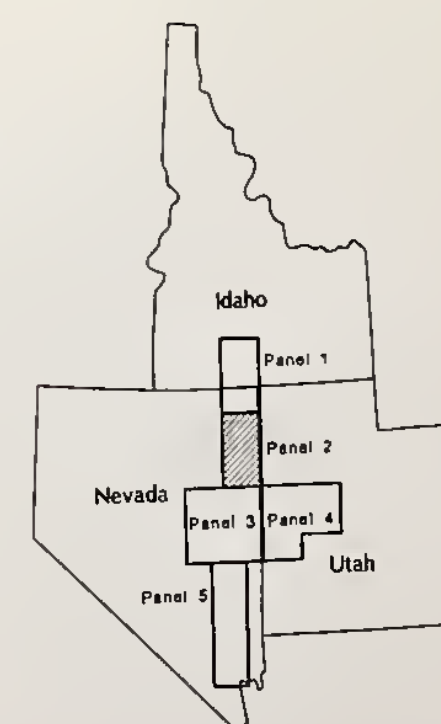
RESOURCE FEATURE

- Wilderness Study Areas
- Special Management Areas
- National Parks & Monuments
- Wildlife Refuges & Management Areas
- Parks & Recreation
- Scenic Highways & Byways
- Trails
- Military Operating Areas
- Restricted Air Space
- Transmission Line
- Pipelines
- Railroads
- Canals
- Wells & Tanks
- Gravel Pits & Borrow Areas
- Corrals
- Airstrips

- 70 Link number
- 15 Junction
- Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wendover, Elko, & Currie

Map prepared by Gimes & Moore

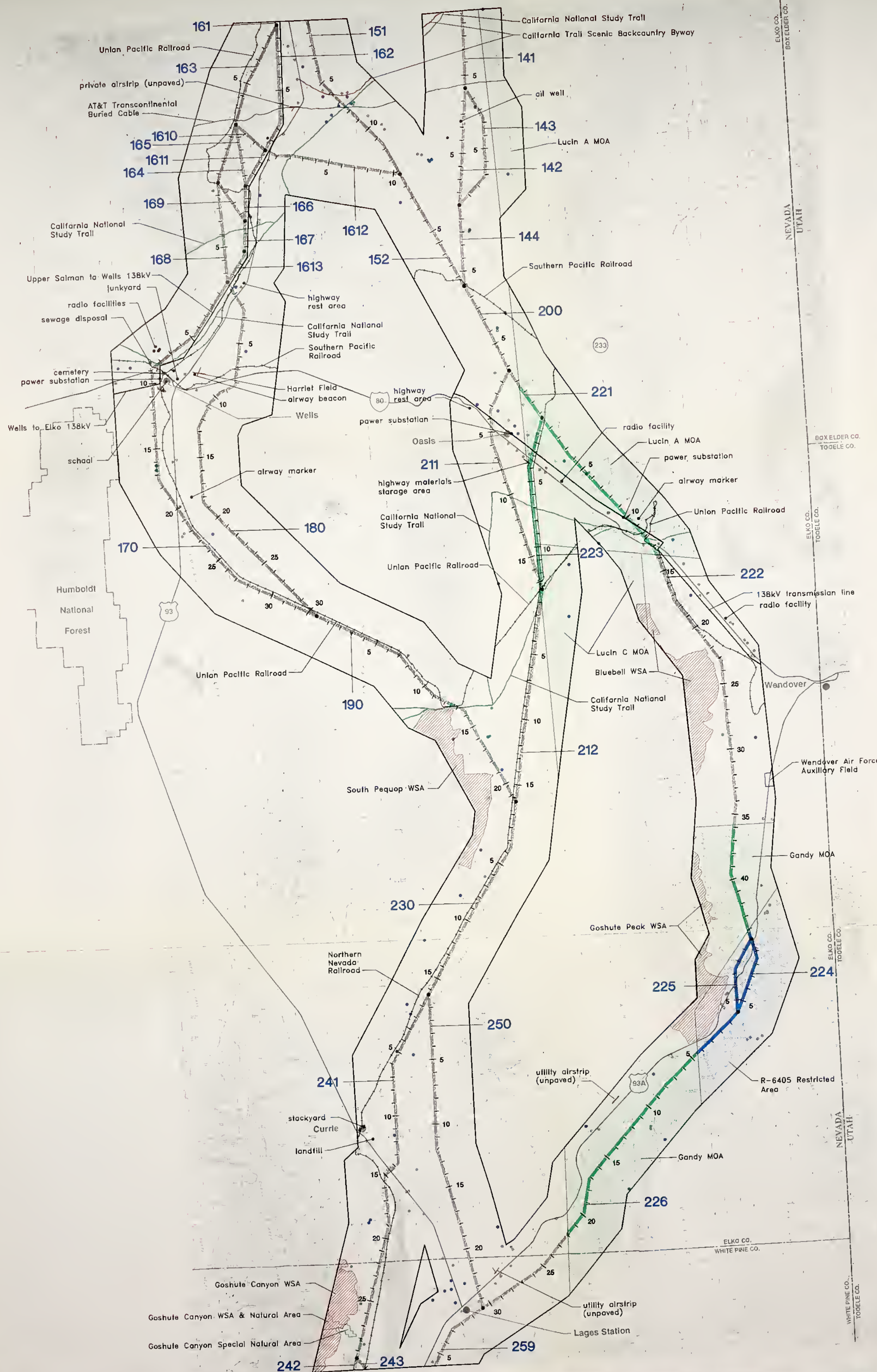


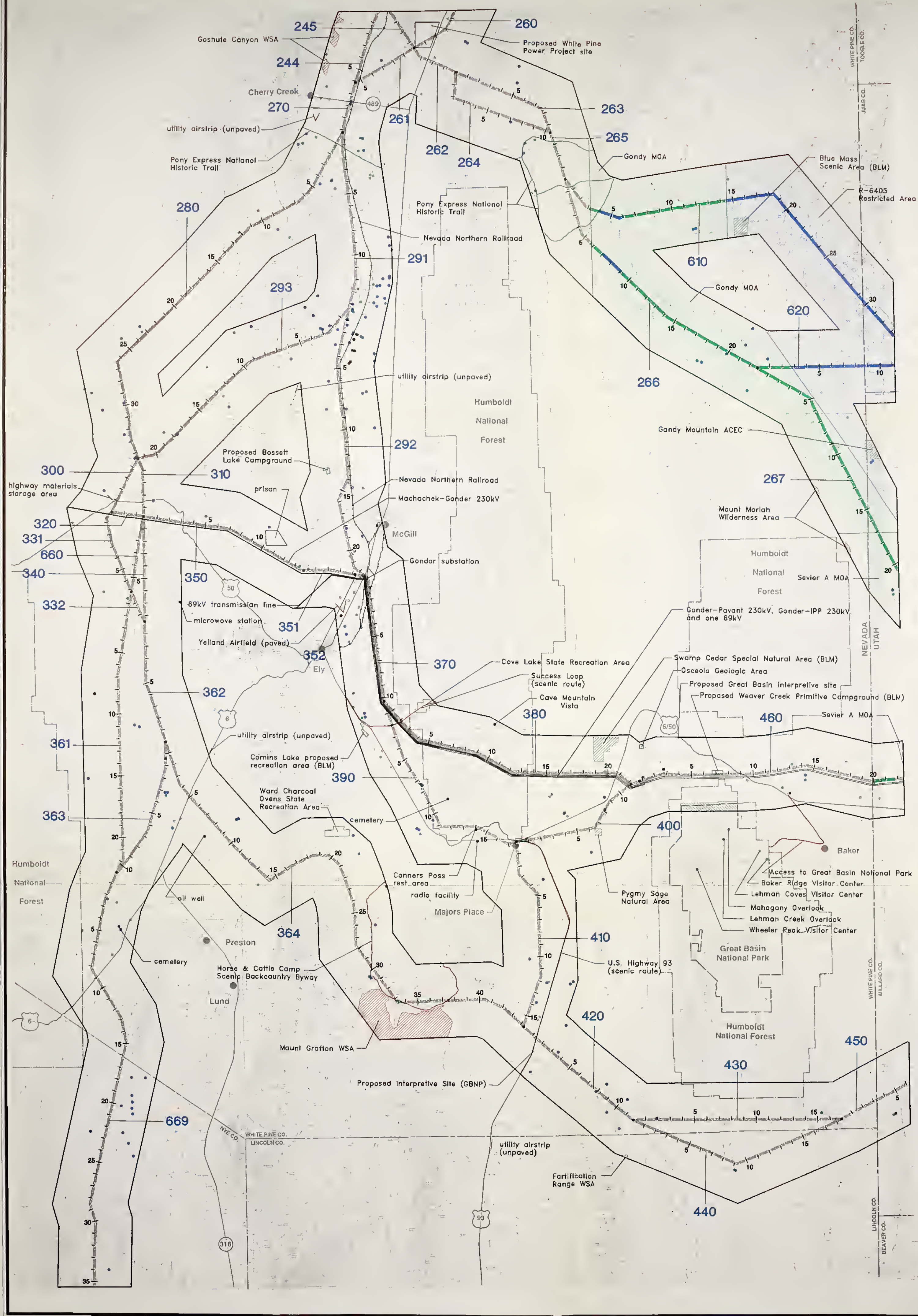
Panel 2 - Land Use Resources

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles





LAND USE RESOURCES

IMPACT LEVEL

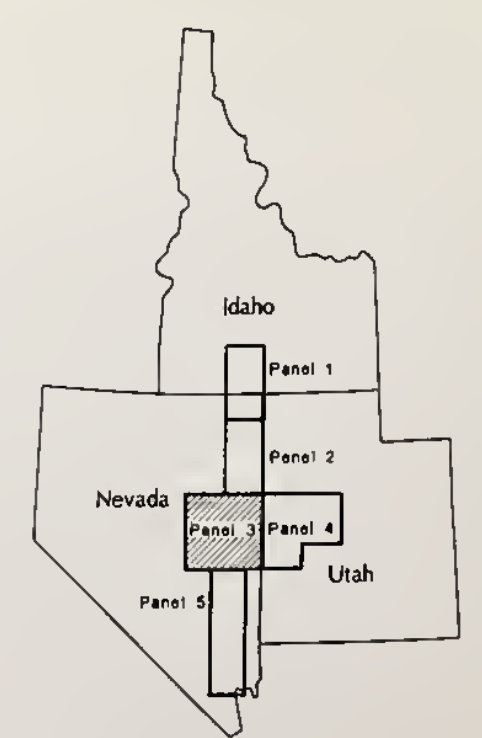
- High
- Moderate
- Low

RESOURCE FEATURE

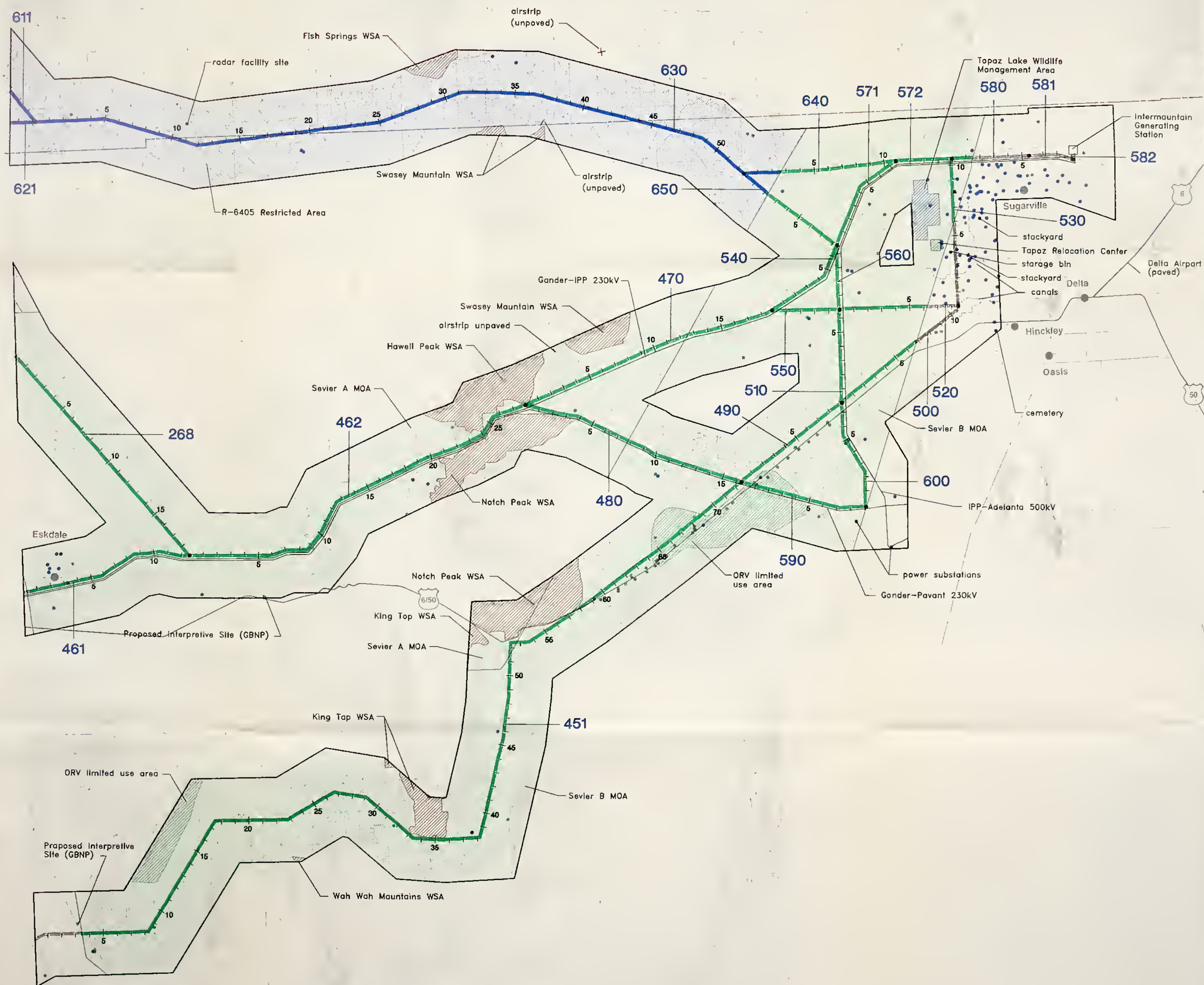
- Wilderness Study Areas
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- Parks & Recreation
- Scenic Highways & Byways
- Trails
- Military Operating Areas
- Restricted Air Space
- Transmission Line
- Pipelines
- Railroads
- Canals
- Wells & Tanks
- Gravel Pits & Borrow Areas
- Corrals
- Airstrips

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Newark Lake, Kern Mountains, Mount Hamilton,
Ely, Duckwater, & Garrison
Map prepared by Dams & Moore



Panel 3 - Land Use Resources



LAND USE RESOURCES

IMPACT LEVEL

- High
- Moderate
- Low

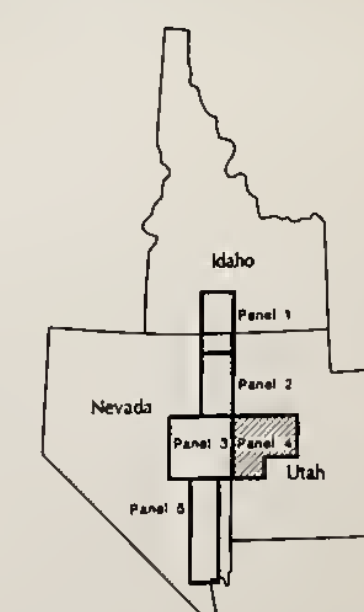
RESOURCE FEATURE

- Wilderness Study Areas
- Special Management Areas
- National Parks & Monuments
- Wildlife Refuges & Management Areas
- Parks & Recreation
- Scenic Highways & Byways
- Trails
- Military Operating Areas
- Restricted Air Space
- Transmission Line
- Pipelines
- Railroads
- Canals
- Wells & Tanks
- Gravel Pits & Borrow Areas
- Corrals
- Airstrips

- 70 Link number
- Junction
- Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lyndly, Tule Valley, Delta,
& Wah Wah Mountains North

Map prepared by Dames & Moore



Panel 3 - Land Use Resources

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles

MILLARD CO.
BEAVER CO.

MILLARD CO.
BEAVER CO.

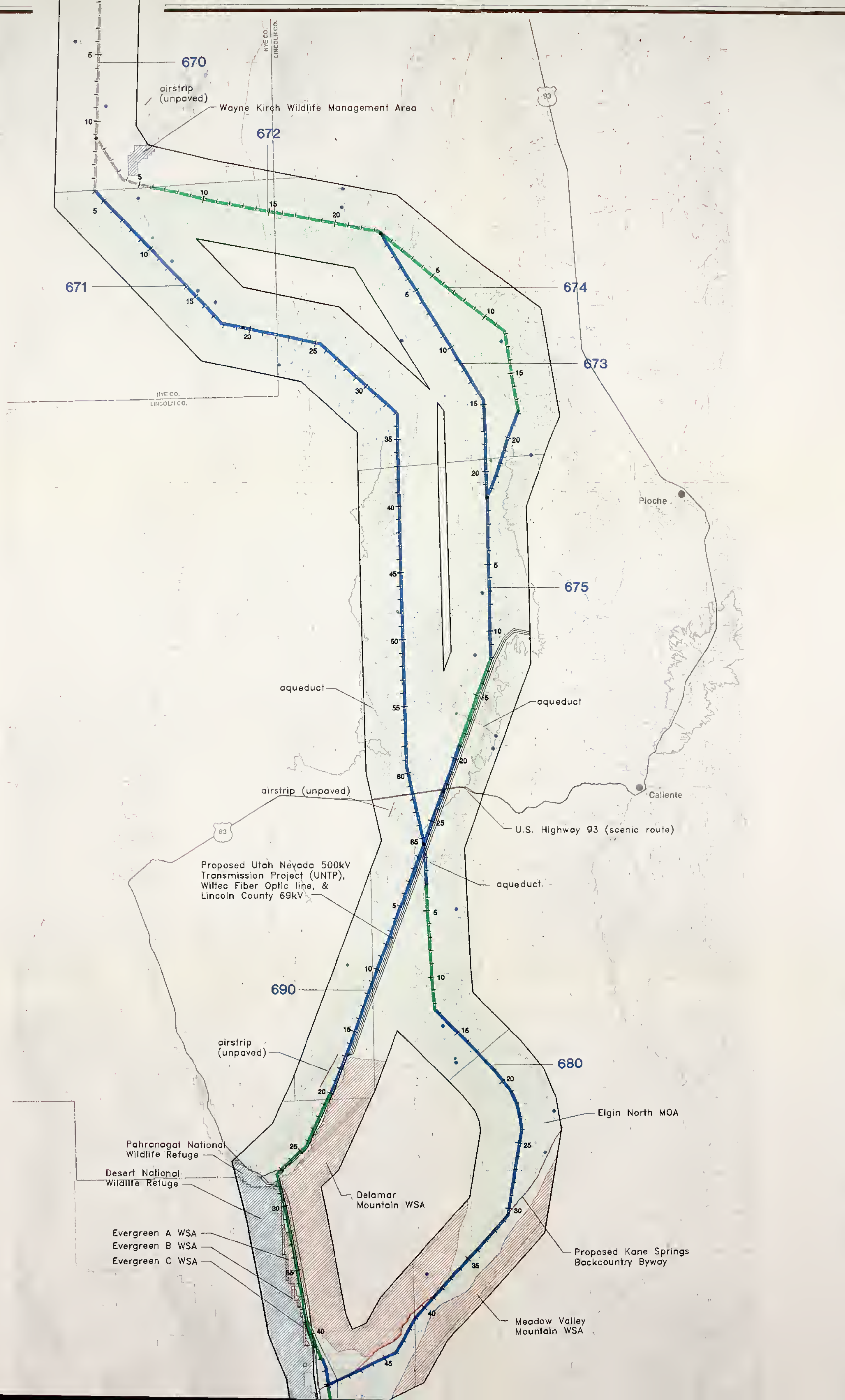
LAND USE RESOURCES

IMPACT LEVEL

- High
- Moderate
- Low

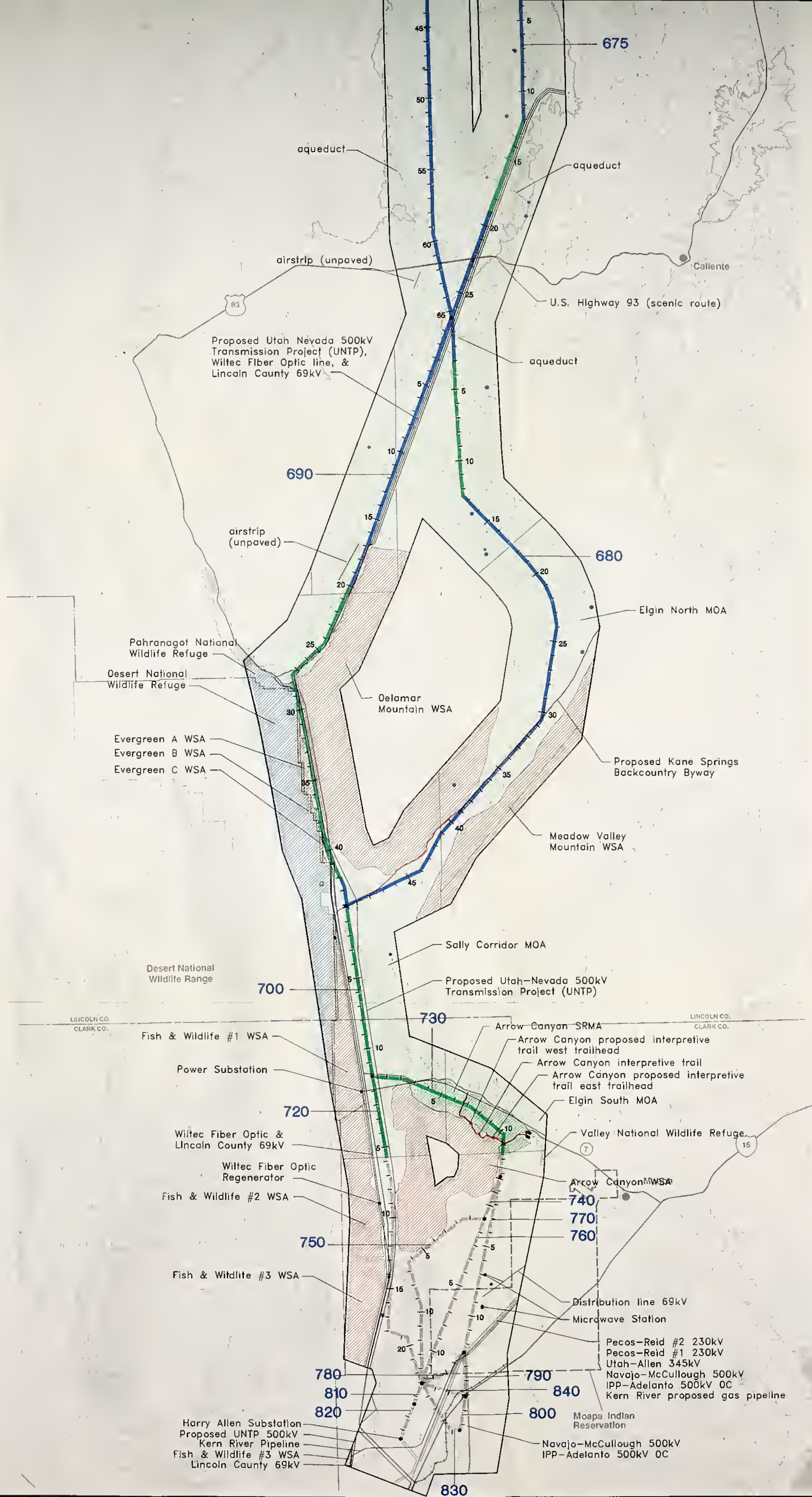
RESOURCE FEATURE

- Wilderness Study Areas
- Special Management Areas
- National Parks & Monuments
- Wildlife Refuges & Management Areas
- Parks & Recreation
- Scenic Highways & Byways
- Trails
- Military Operating Areas
- Restricted Air Space
- Transmission Line
- Pipelines
- Railroads
- Canals
- Wells & Tanks
- Gravel Pits & Borrow Areas
- Corrals
- Airstrips



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps

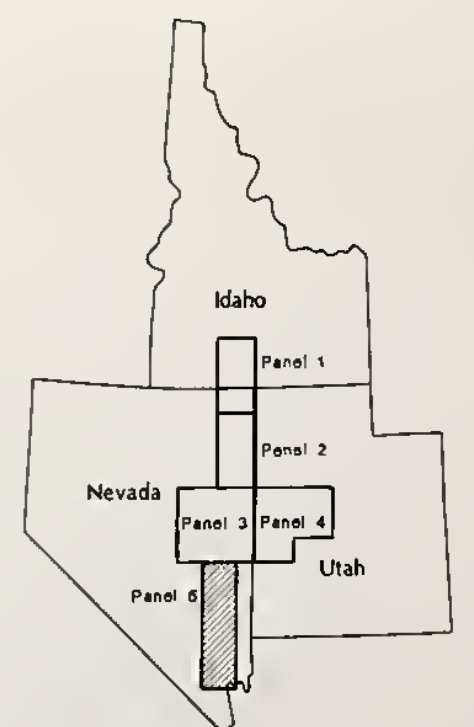


- ++ Railroads
- Canals
- Wells & Tanks
- Gravel Pits & Borrow Areas
- Corrals
- Airstrips

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Quinn Canyon Range, Wilson Creek Range, Timpanute Range, Callente, Pahrnagot Range, Clover Mountain, Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Dames & Moore



Panel 5 - Land Use Resources

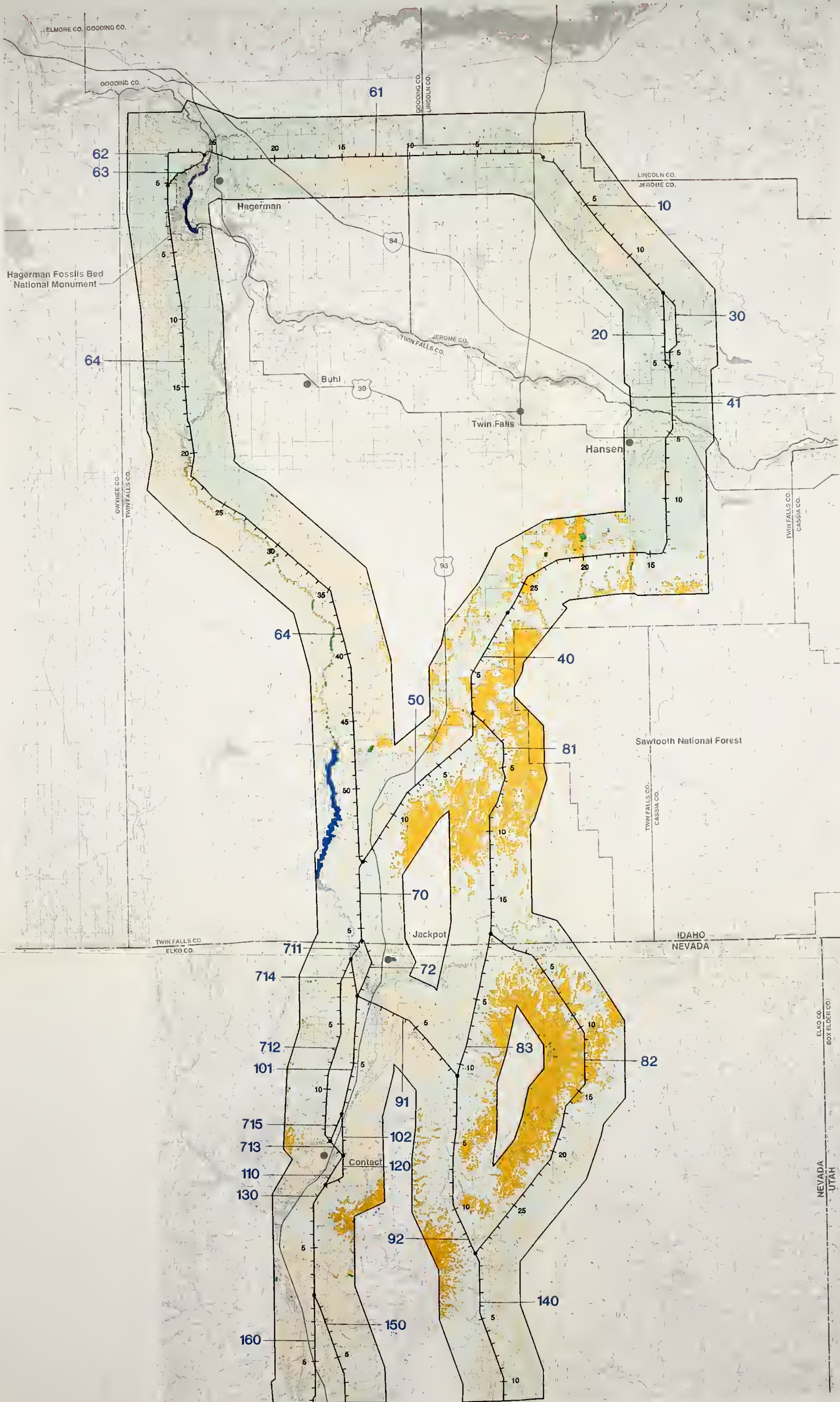
**SOUTHWEST
INTERTIE
PROJECT**

Scale 1:250,000

0 5 10 miles



LANDCOVER



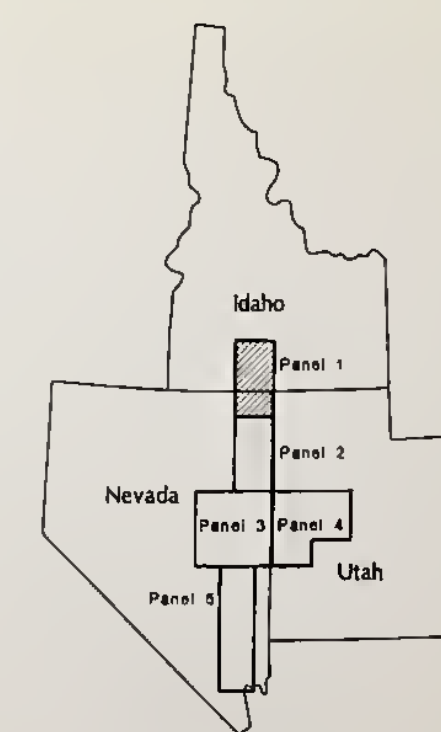
LANDCOVER

- Agriculture
- Grassland
- Sage Scrub
- Water
- Mesic/Riparian
- Mountain Conifer/Broadleaf
- Mountain Shrub/Grasses
- Playa
- Bare Soil, Basaltic Flows, & Other

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek,
& Jackpot

Map prepared by Dames & Moore

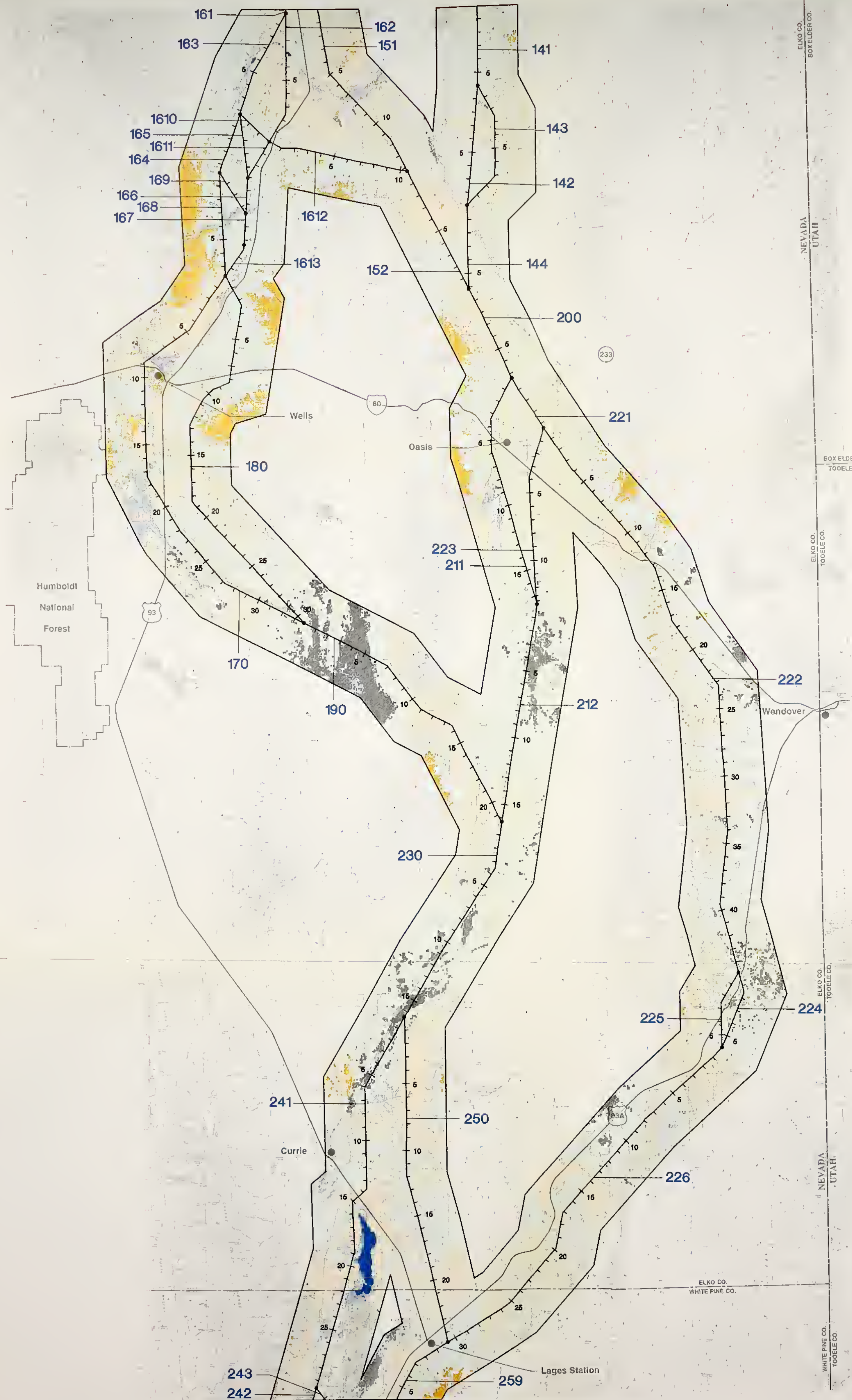


Panel 1 - Landcover

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles



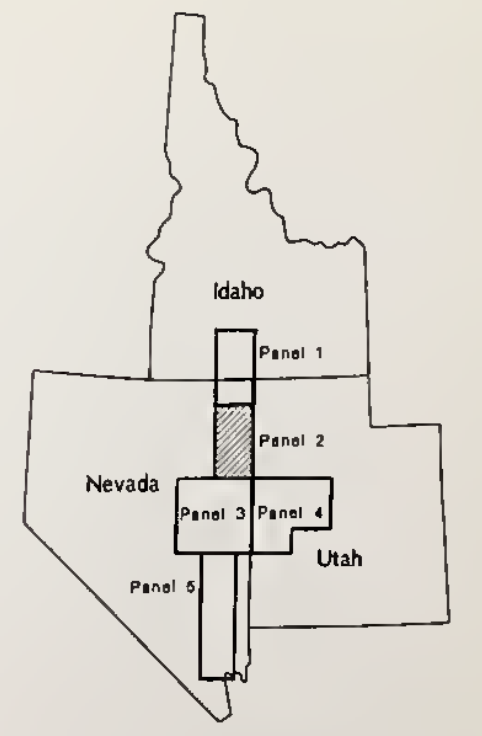
LANDCOVER

- Agriculture
- Grassland
- Sage Scrub
- Water
- Mesic/Riparian
- Mountain Conifer/Broadleaf
- Mountain Shrub/Grasses
- Playa
- Bare Soil, Basaltic Flows, & Other

- 70** Link number
- Junction
- Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wandover, Elko, & Currie

Map prepared by Dames & Moore



Panel 2 - Landcover

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000
0 5 10 miles

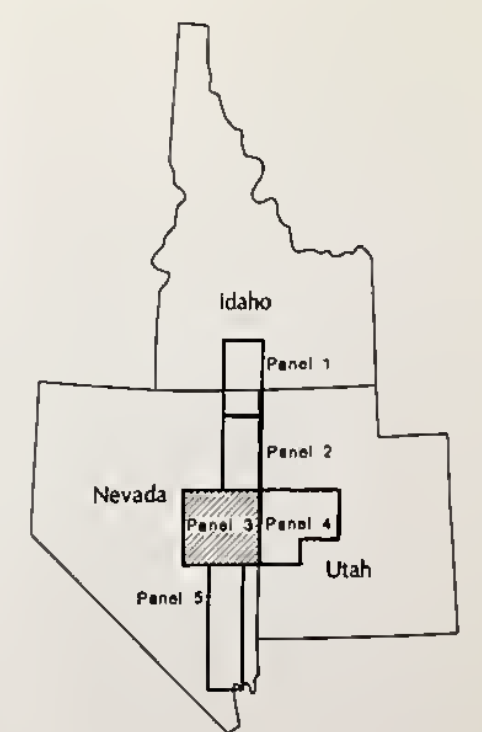


LANDCOVER

- Agriculture
- Grassland
- Sage Scrub
- Water
- Mesic/Riparian
- Mountain Conifer/Broadleaf
- Mountain Shrub/Grasses
- Playa
- Bare Soil, Basaltic Flows, & Other

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Newark Lake, Kern Mountains, Mount Hamilton,
 Ely, Duckwater, & Garrison
 Map prepared by Demas & Moore

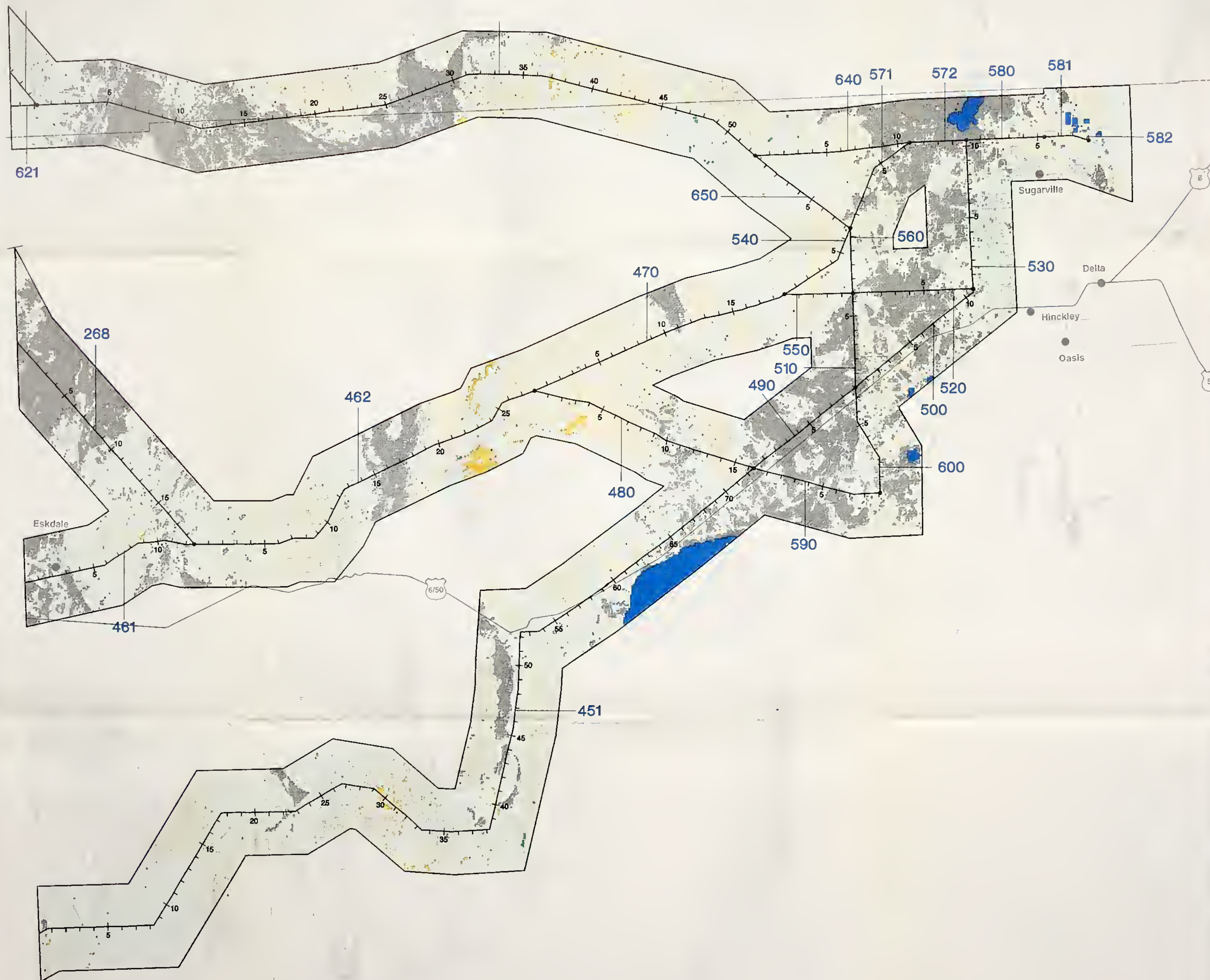


Panel 3 - Landcover

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles



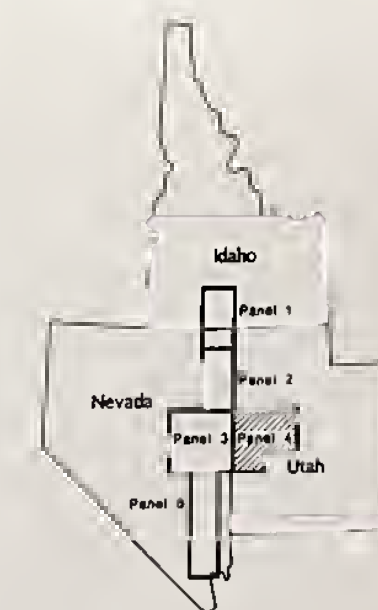
LANDCOVER

- Agriculture
- Grassland
- Sage Scrub
- Water
- Mesic/Riparian
- Mountain Conifer/Broadleaf
- Mountain Shrub/Grasses
- Playa
- Bare Soil, Basaltic Flows, & Other

- 70 Link number
- Junction
- 15 Milepost
- State boundary
- Forest Service boundary
- City, town, or community
- County boundary

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lynndyl, Tule Valley, Delta,
& Wah Wah Mountains North

Map prepared by Dames & Moore



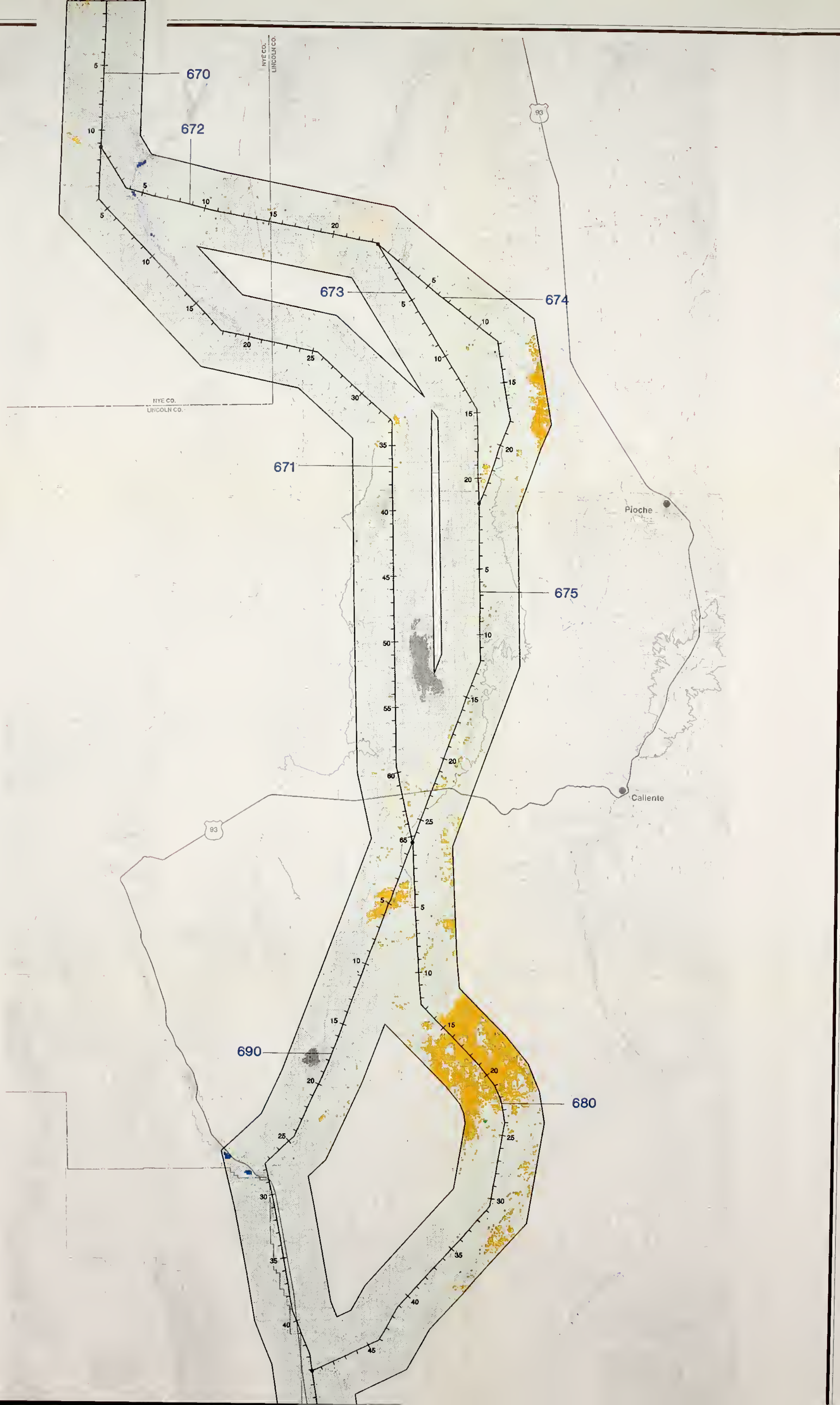
Panel 4 - Landcover

SOUTHWEST INTER Tie PROJECT

Scale 1:250,000
0 5 10 miles

MILLARD CO.
BEAVER CO.

MILLARD CO.
BEAVER CO.

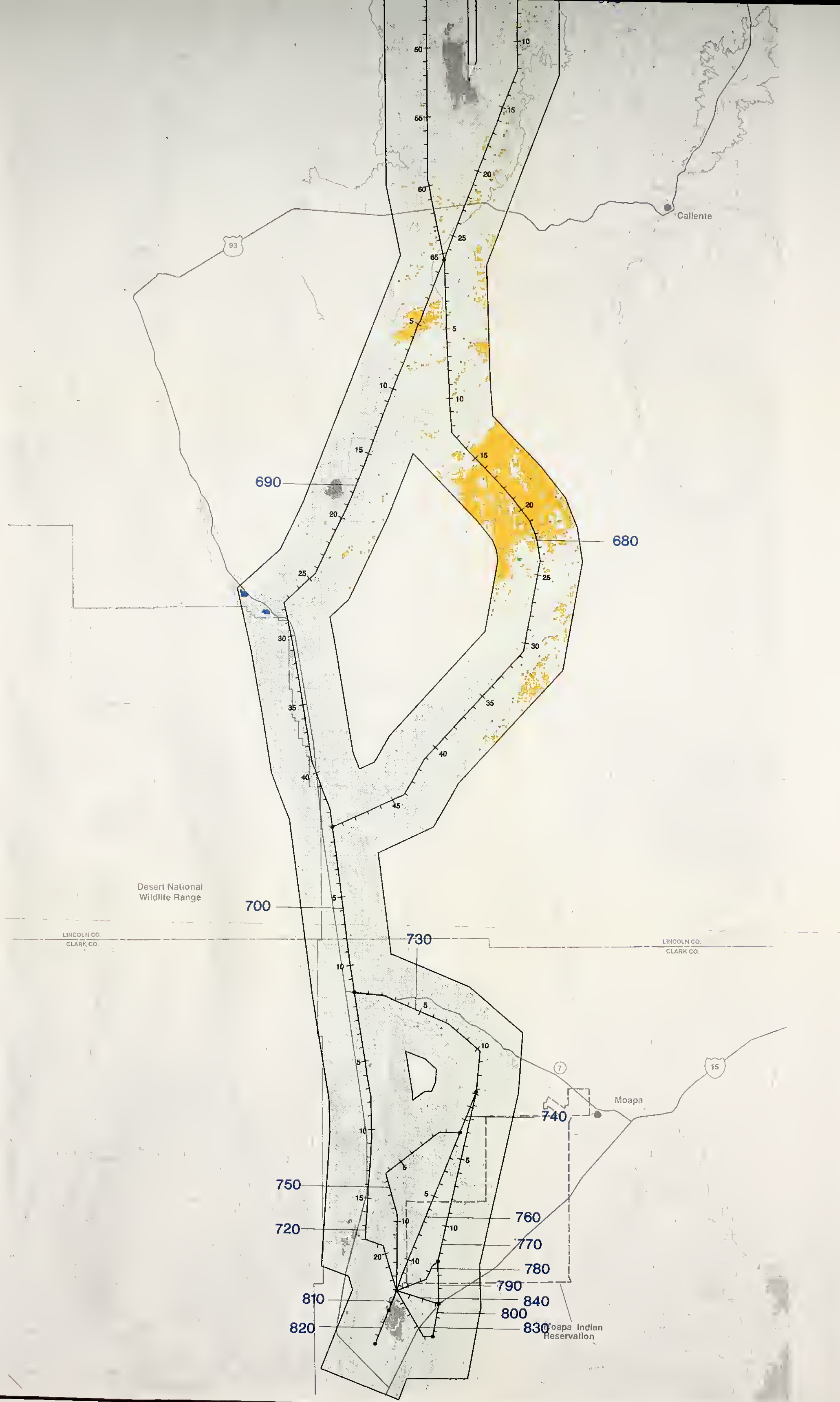


LANDCOVER

- ☐ Agriculture
- ☐ Grassland
- ☐ Sage Scrub
- ☐ Water
- ☐ Wetland/Riparian
- ☐ Mt. Conifer/Broadleaf
- ☐ Mt. Shrub/Grasses
- ☐ Playa
- ☐ Other (Bare Soil, Lava, other)

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

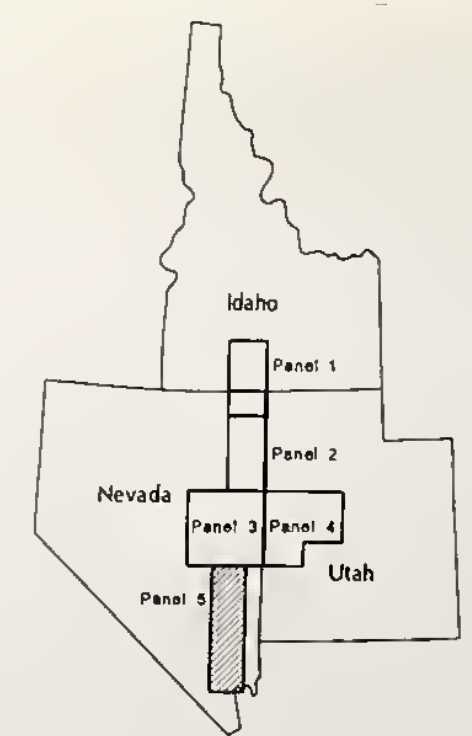
Source: USGS 1:100,000 metric series topographic maps
Quinn Canyon Range, Wilson Creek Range, Timpahute



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Quinn Canyon Range, Wilson Creek Range, Timpahute Range, Caliente, Pahrump Range, Clover Mountain, Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Demas & Moore



Panel 5 - Landcover

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000
 0 5 10 miles



JURISDICTION



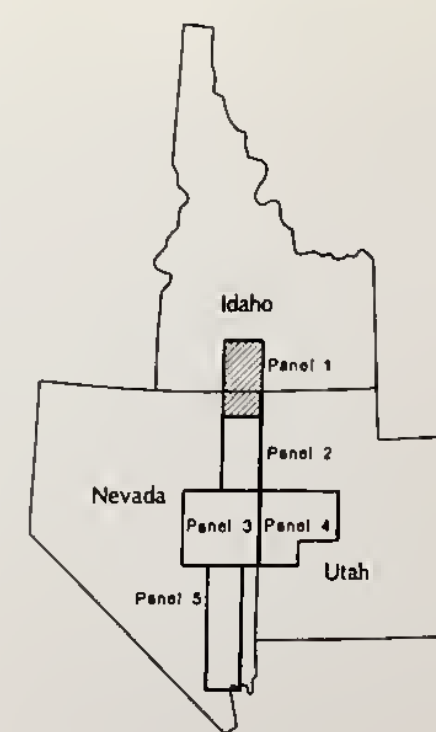
JURISDICTION

- Bureau of Land Management
- Forest Service
- State
- Private
- Other

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek,
& Jackpot

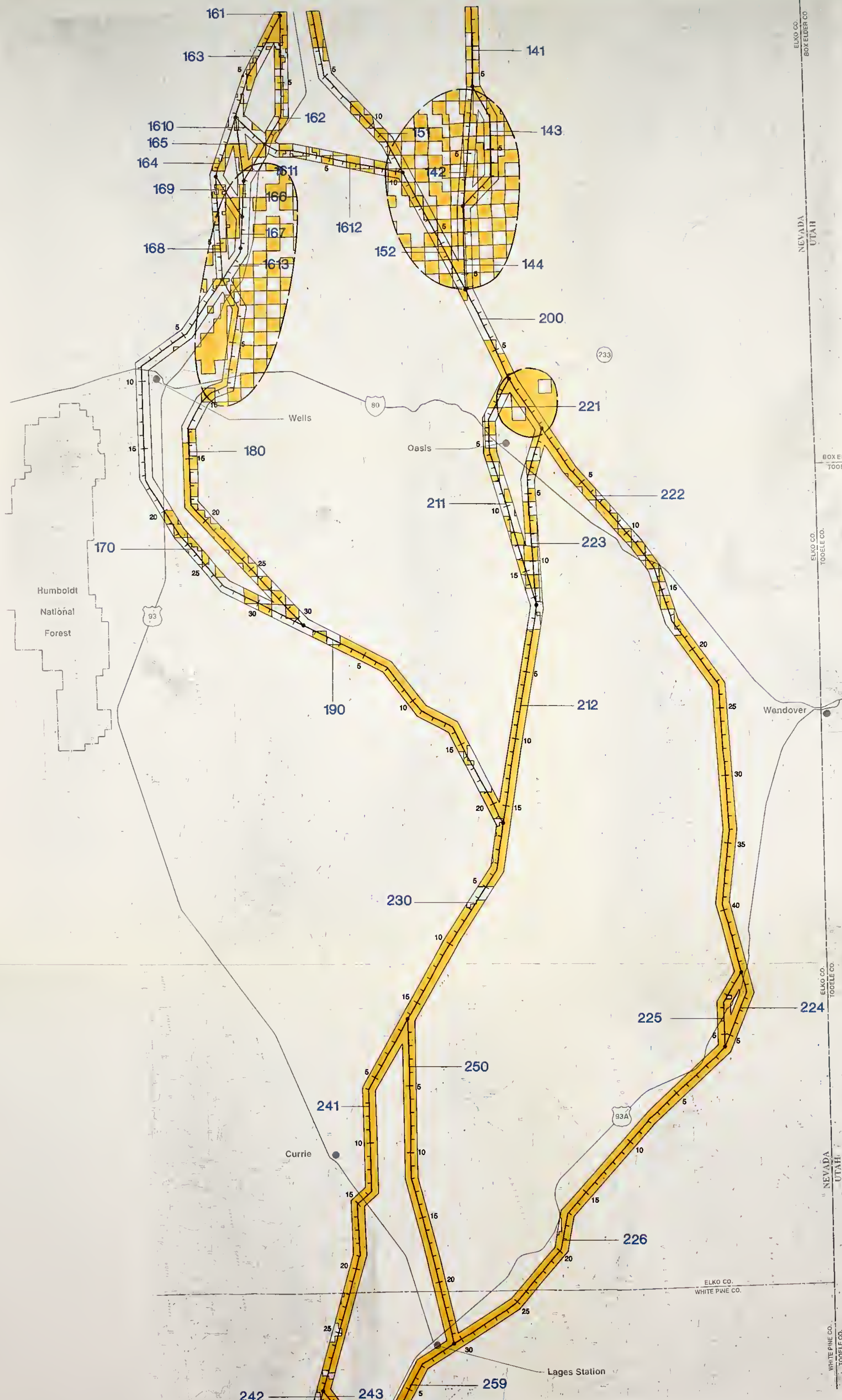
Map prepared by Dames & Moore



Panel 1 - Jurisdiction

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000
0 5 10 miles



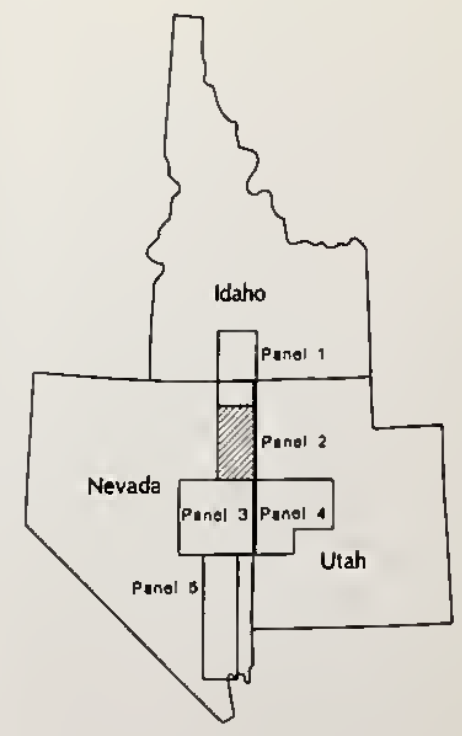
JURISDICTION

- Bureau of Land Management
- Forest Service
- State
- Private
- Other

- 70** Link number
- Junction
- 15** Milepost
- County boundary
- - - State boundary
- - - Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wendover, Elko, & Currie

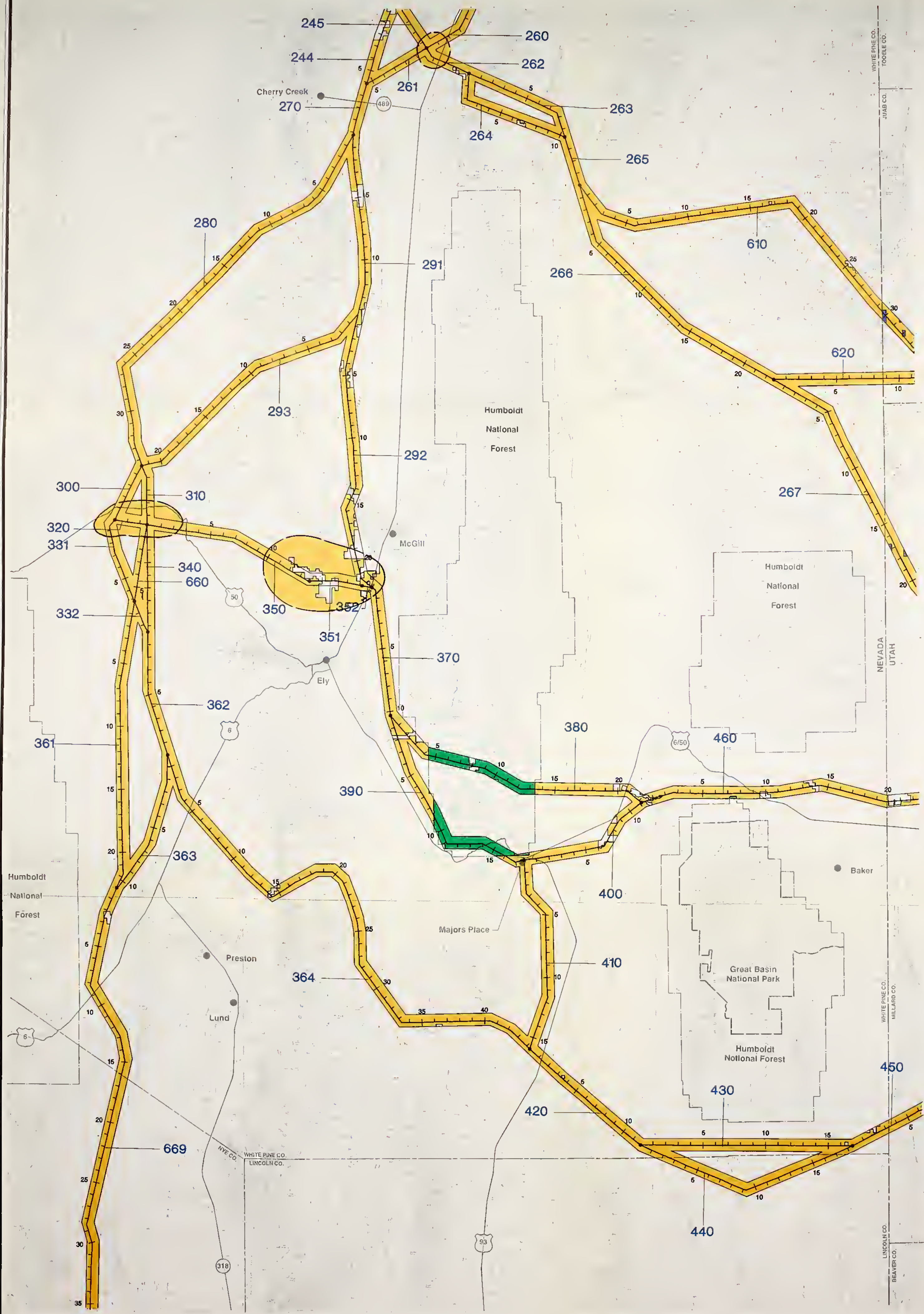
Map prepared by Demos & Moore



Panel 2 - Jurisdiction

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000
0 5 10 miles

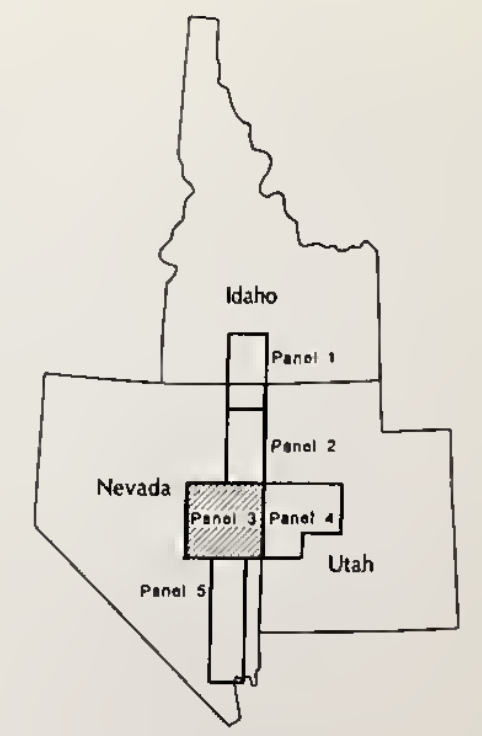


JURISDICTION

- Bureau of Land Management
- Forest Service
- State
- Private
- Other

- 70** Link number
- Junction
- 15** Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Newark Lake, Kern Mountains, Mount Hamilton,
 Ely, Duckwater, & Garrison
 Map prepared by Dames & Moore



Panel 3 - Jurisdiction

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



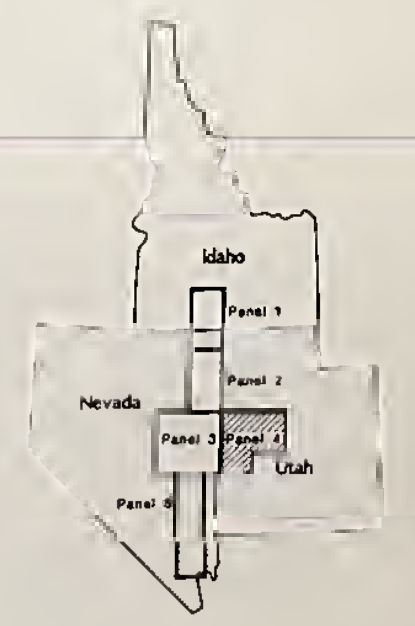
JURISDICTION

- Bureau of Land Management
- Forest Service
- State
- Private
- Other

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Fish Springs, Lynndyl, Tule Valley, Delta,
 & Wah Wah Mountains North

Map prepared by Dames & Moore



Panel 4 - Jurisdiction

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



JURISDICTION

- Bureau of Land Management
- Forest Service
- State
- Private
- Other

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

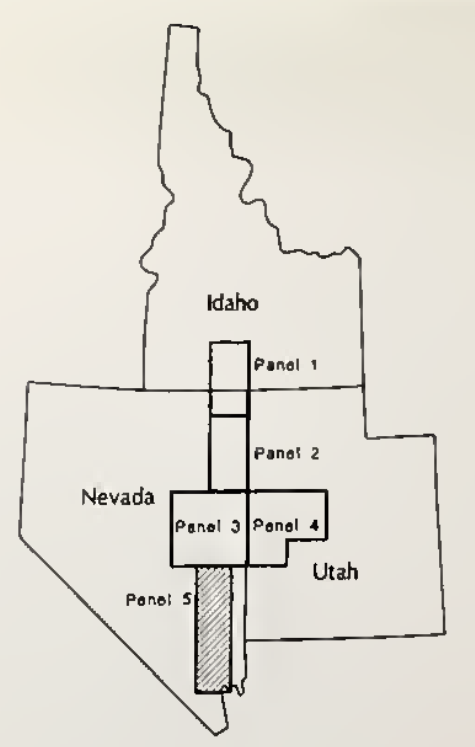
Source: USGS 1:100,000 metric series topographic maps



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Quinn Canyon Range, Wilson Creek Range, Timpanute Range, Caliente, Pahrangat Range, Clover Mountain, Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Dames & Moore



Panel 5 - Jurisdiction

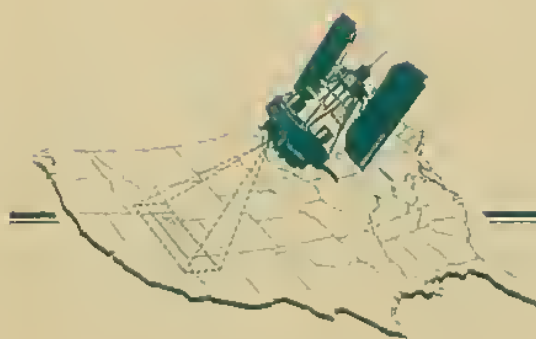
SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0

5

10 miles



VISUAL RESOURCES

VISUAL RESOURCES

IMPACT LEVELS

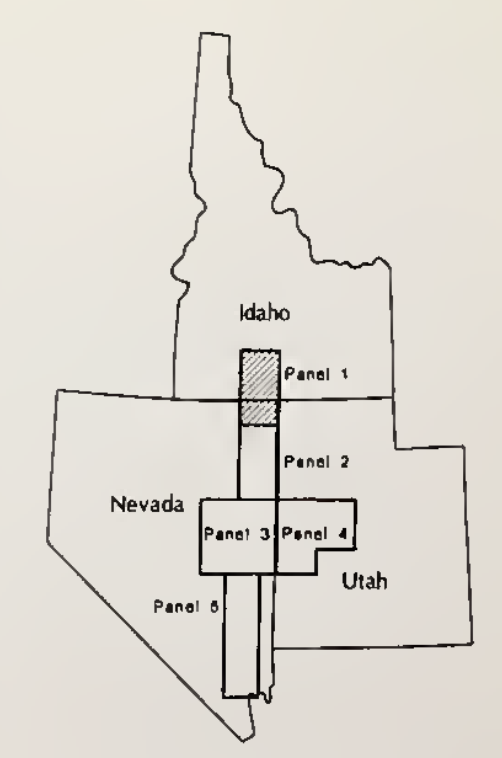
- High
- Moderate
- Low

POTENTIAL IMPACT ZONES

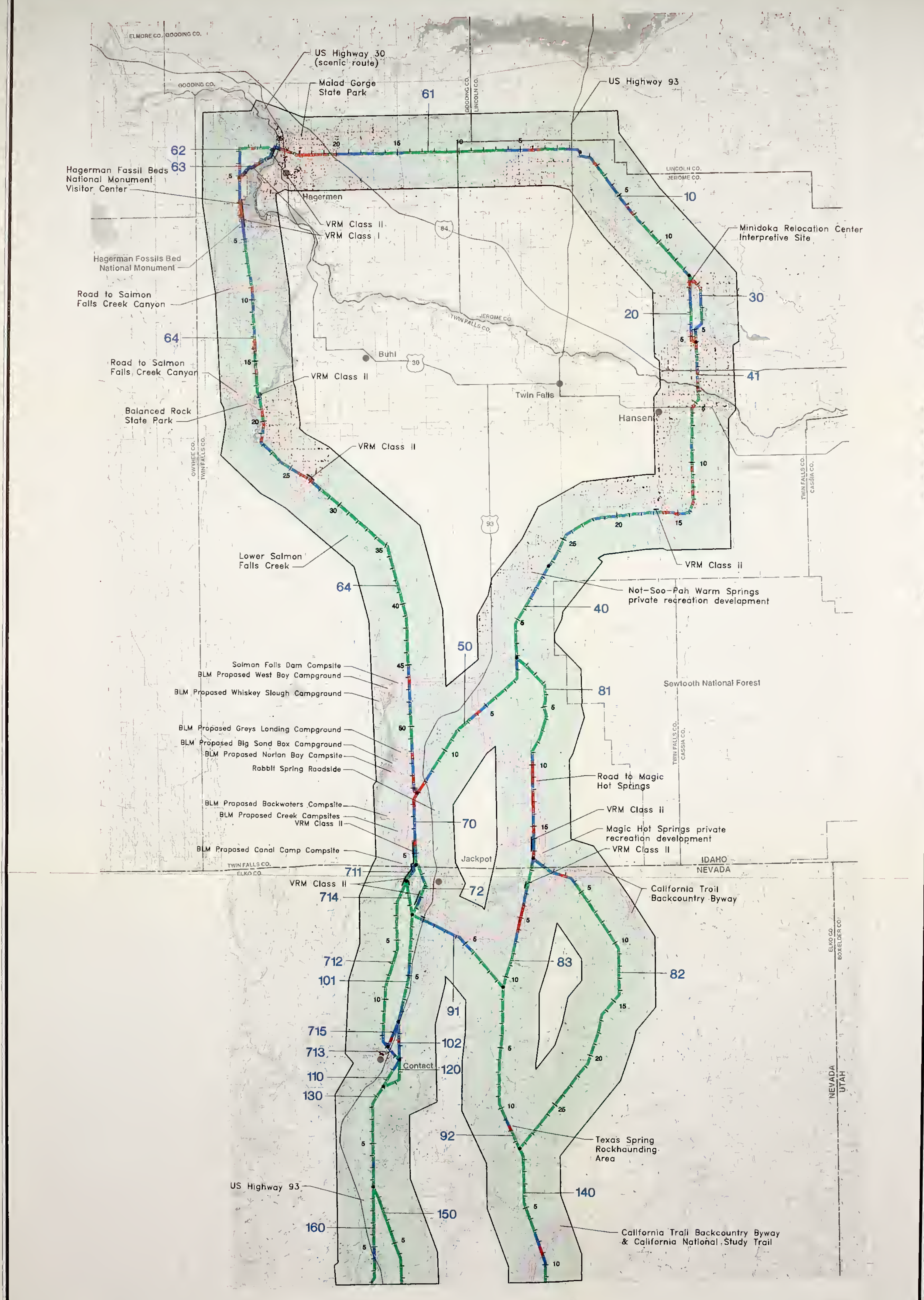
- Highest
- Moderate
- Lowest
- Residence Locations

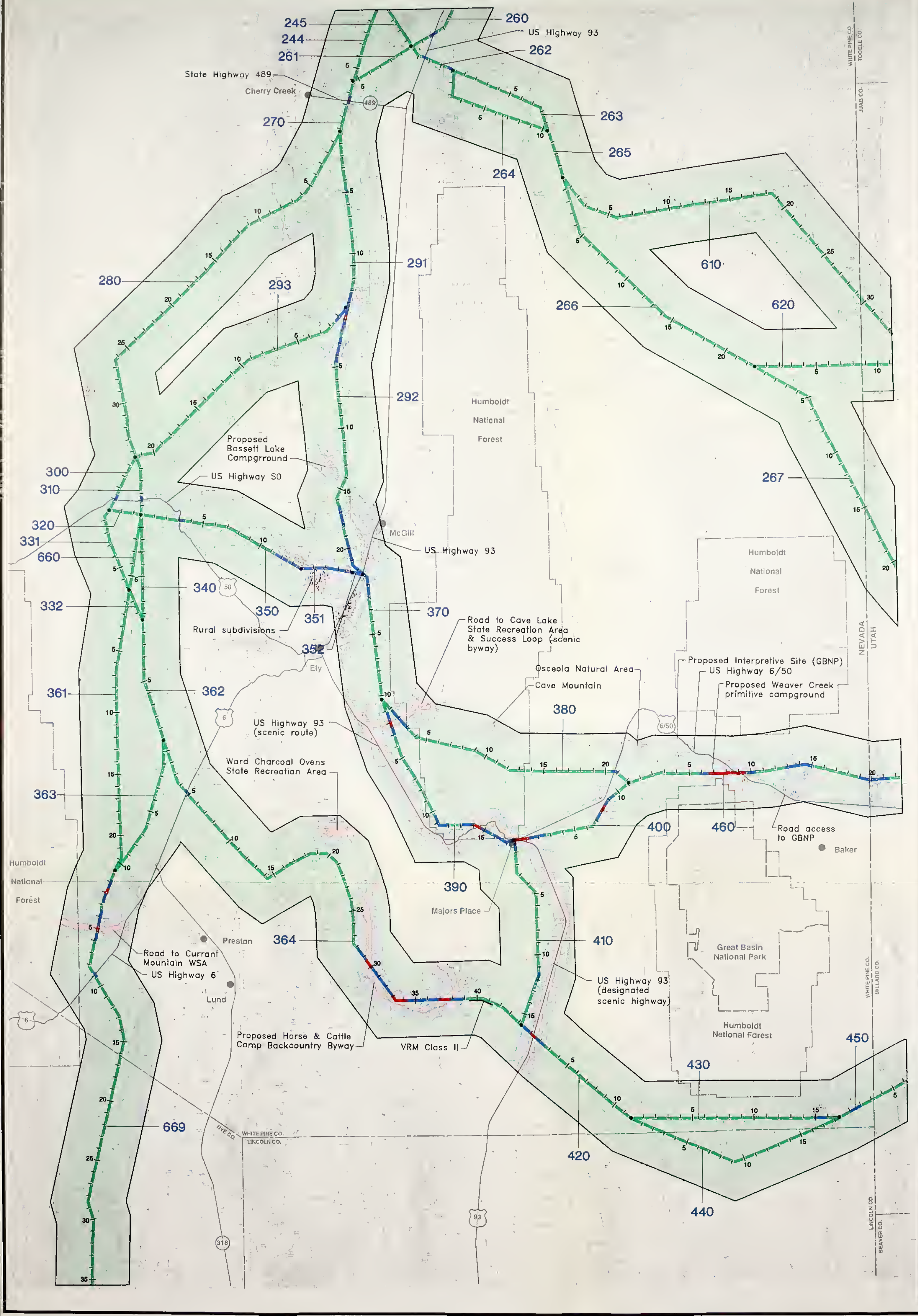
- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glens Ferry, Rogerson, Sheep Creek, & Jackpot
Map prepared by Demas & Moore



Panel 1 - Visual Resources





VISUAL RESOURCES

IMPACT LEVELS

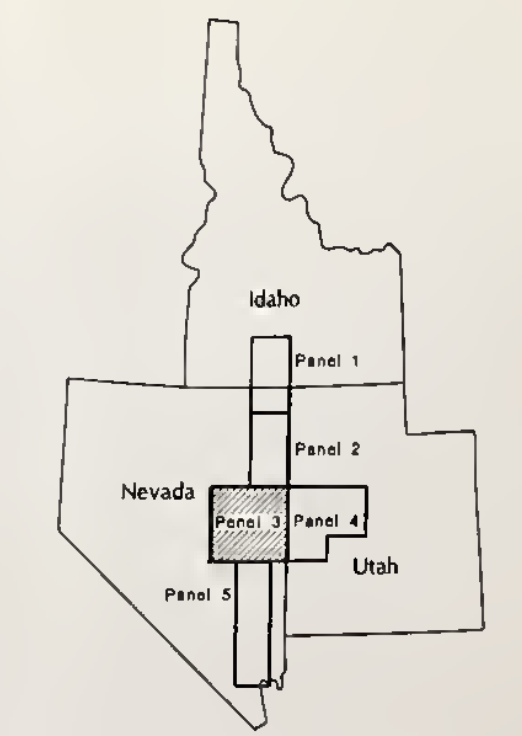
- High
- Moderate
- Low

POTENTIAL IMPACT ZONES

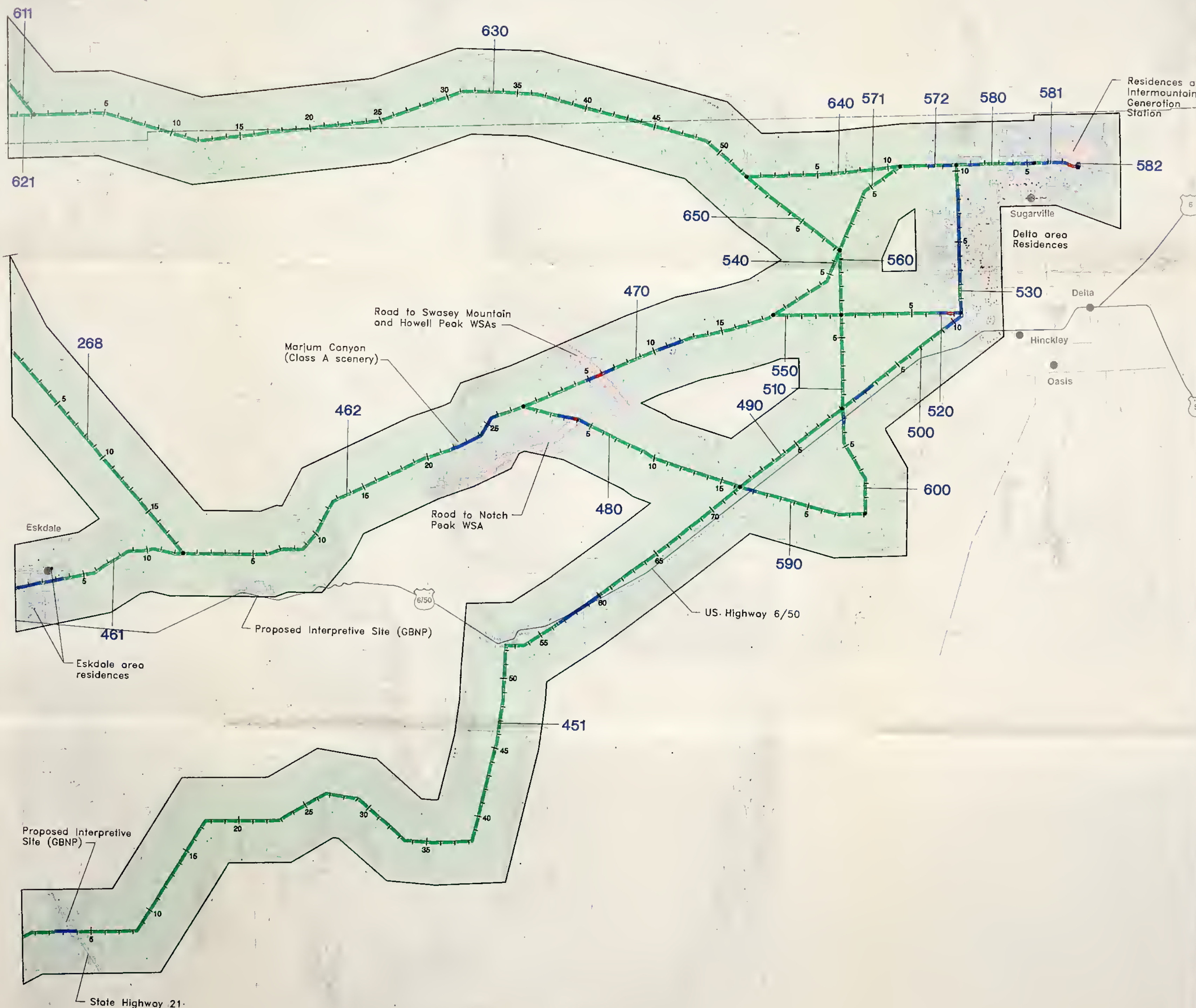
- Highest
- Moderate
- Lowest
- Residence Locations

- 70 Link number
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Newark Lake, Kern Mountains, Mount Hamilton,
 Ely, Duckwater, & Garrison
 Map prepared by Dames & Moore



Panel 3 - Visual Resources



VISUAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

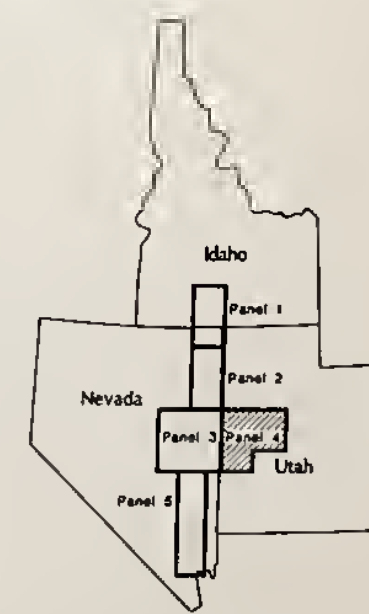
POTENTIAL IMPACT ZONES

- Highest
- Moderate
- Lowest
- Residence Locations

- 70 Link number
- State boundary
- Junction
- Forest Service boundary
- Milepost
- City, town, or community
- County boundary

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lynndyl, Tule Valley, Delta,
& Wah Wah Mountains North

Map prepared by Dames & Moore



Panel 4 - Visual Resources

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles

MILLARD CO.
BEAVER CO.

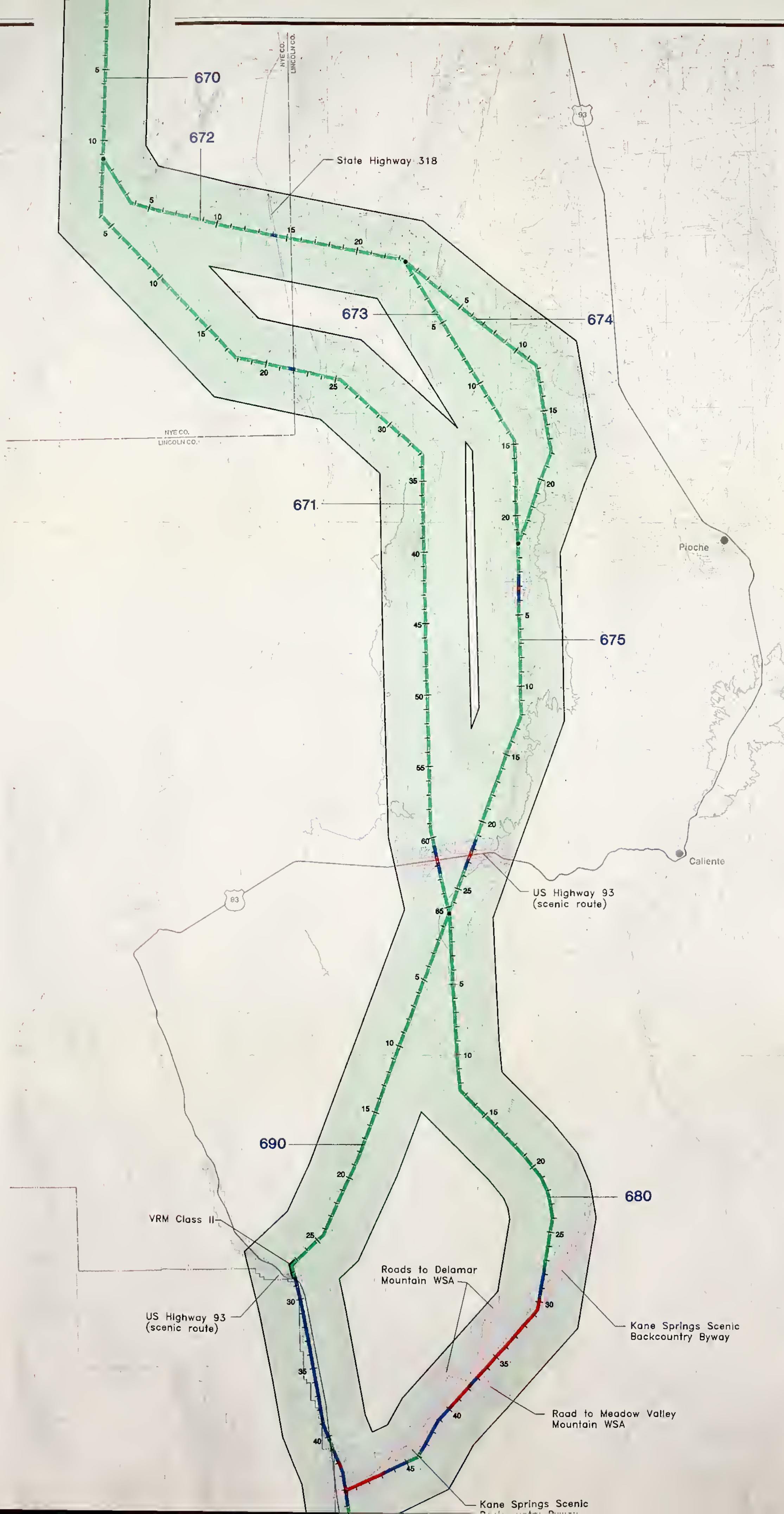
MILLARD CO.
BEAVER CO.

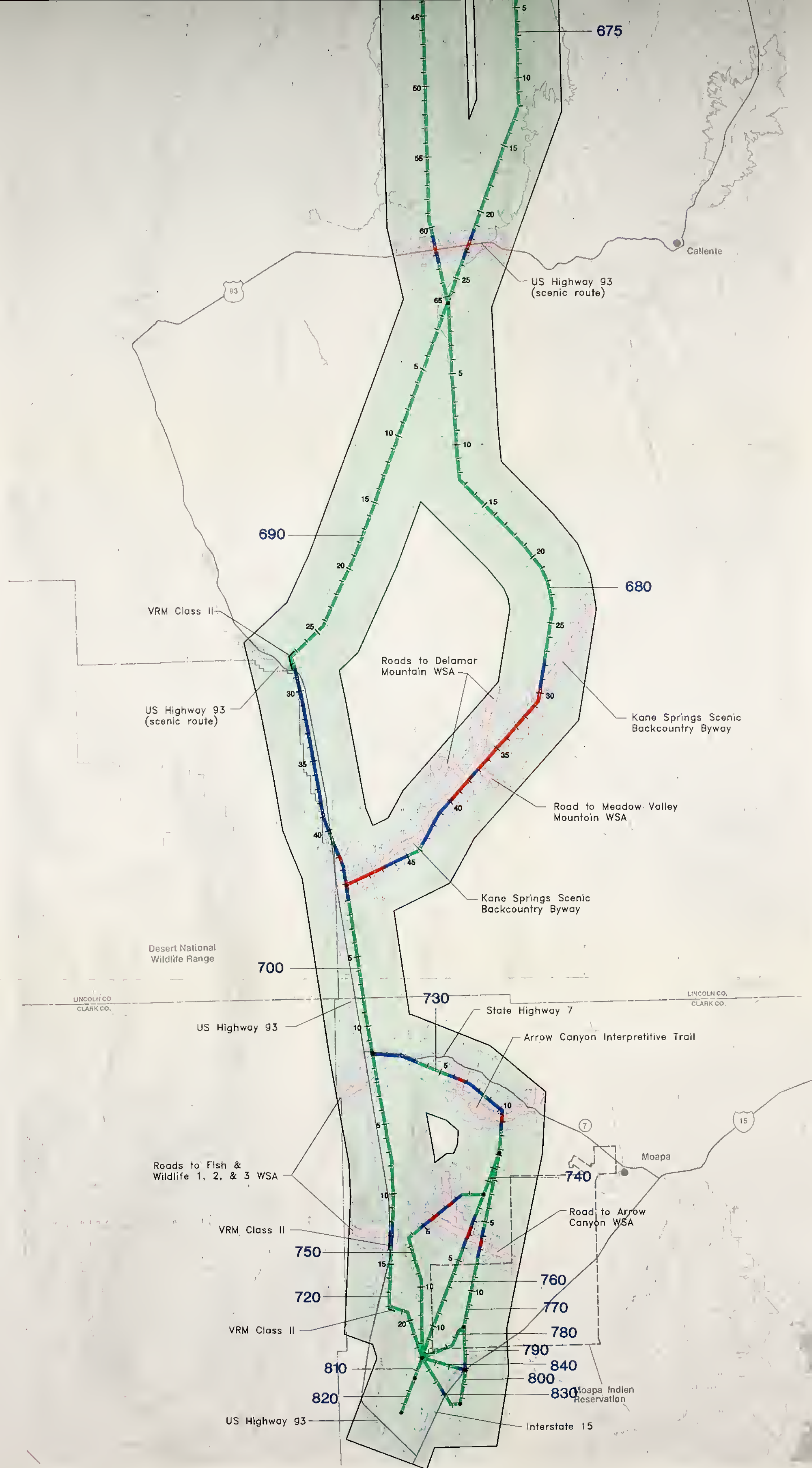
IMPACT LEVELS

- ## POTENTIAL IMPACT ZONES

- 70 Link number
 O Junction
 15 Milepost
 --- County boundary
 --- State boundary
 --- Forest Service boundary
 • City, town, or community

Source: USGS 1:100,000 metric series topographic maps

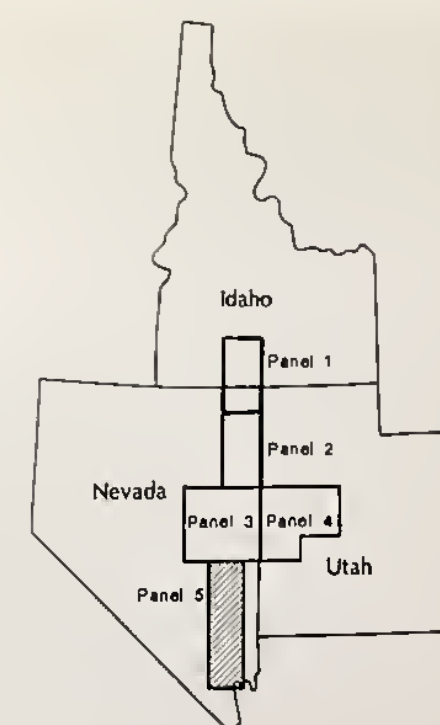




- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Quinn Canyon Range, Wilson Creek Range, Timpahute Range, Callente, Pahrangat Range, Clover Mountain Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Dames & Moore



Panel 5 - Visual Resources

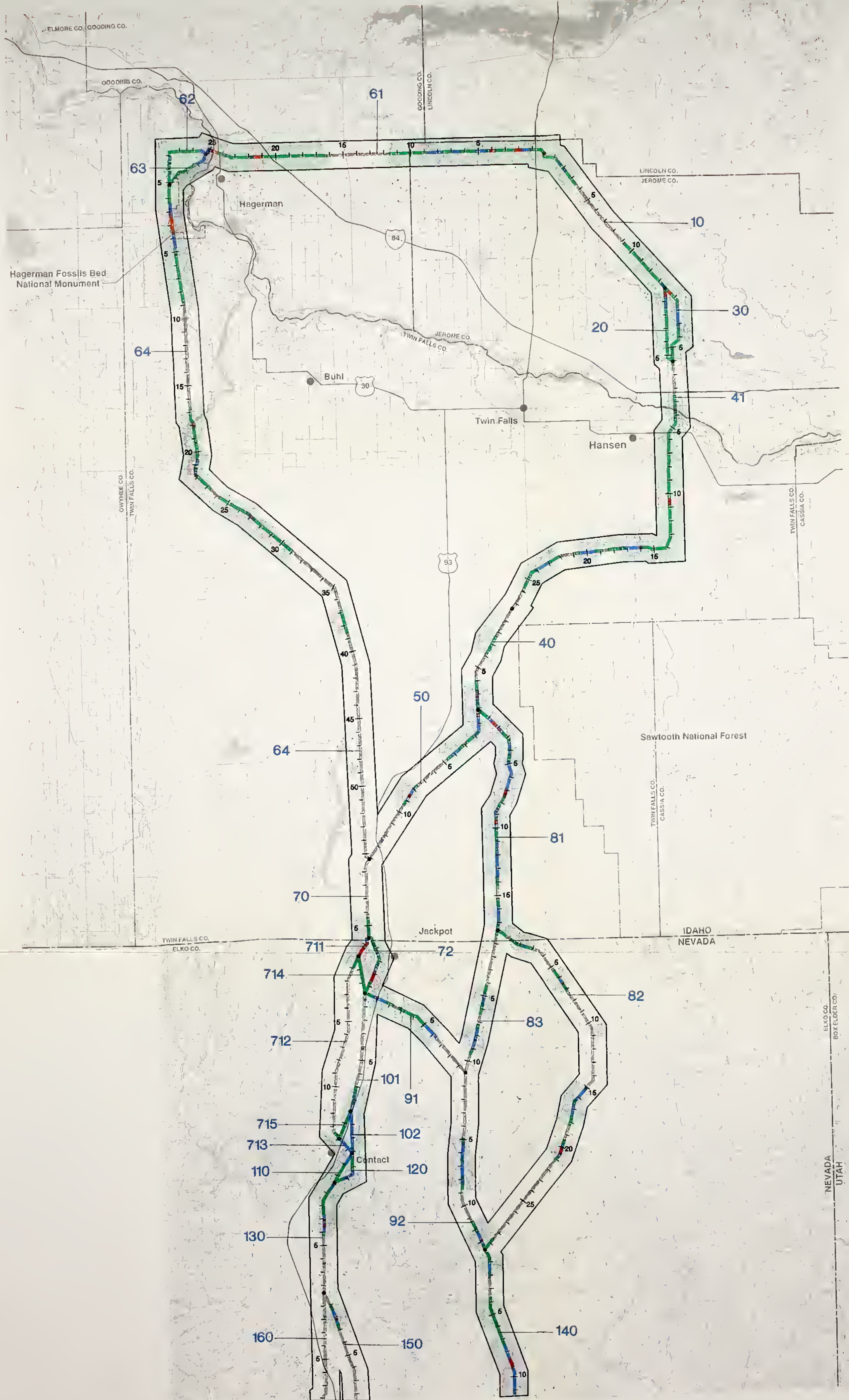
**SOUTHWEST
 INTERTIE
 PROJECT**

Scale 1:250,000

0 5 10 miles



CULTURAL RESOURCES



CULTURAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

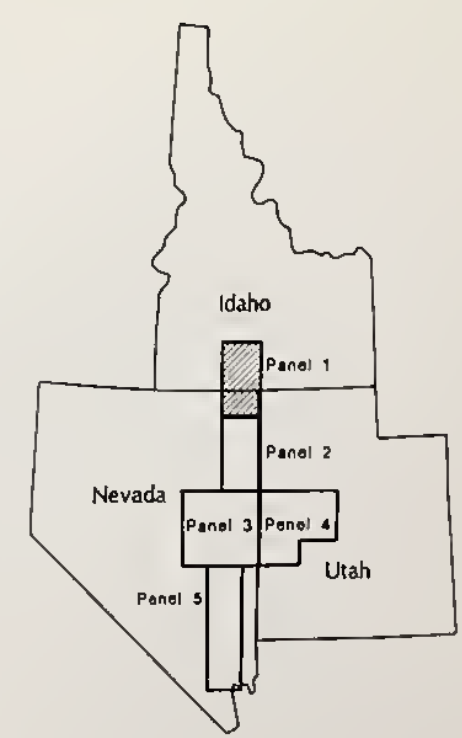
KNOWN RESOURCES & PREDICTED SENSITIVE ZONES

- High
- Moderate
- Low

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Twin Falls, Glenns Ferry, Rogerson, Sheep Creek, Jackpot

Map prepared by Dames & Moore

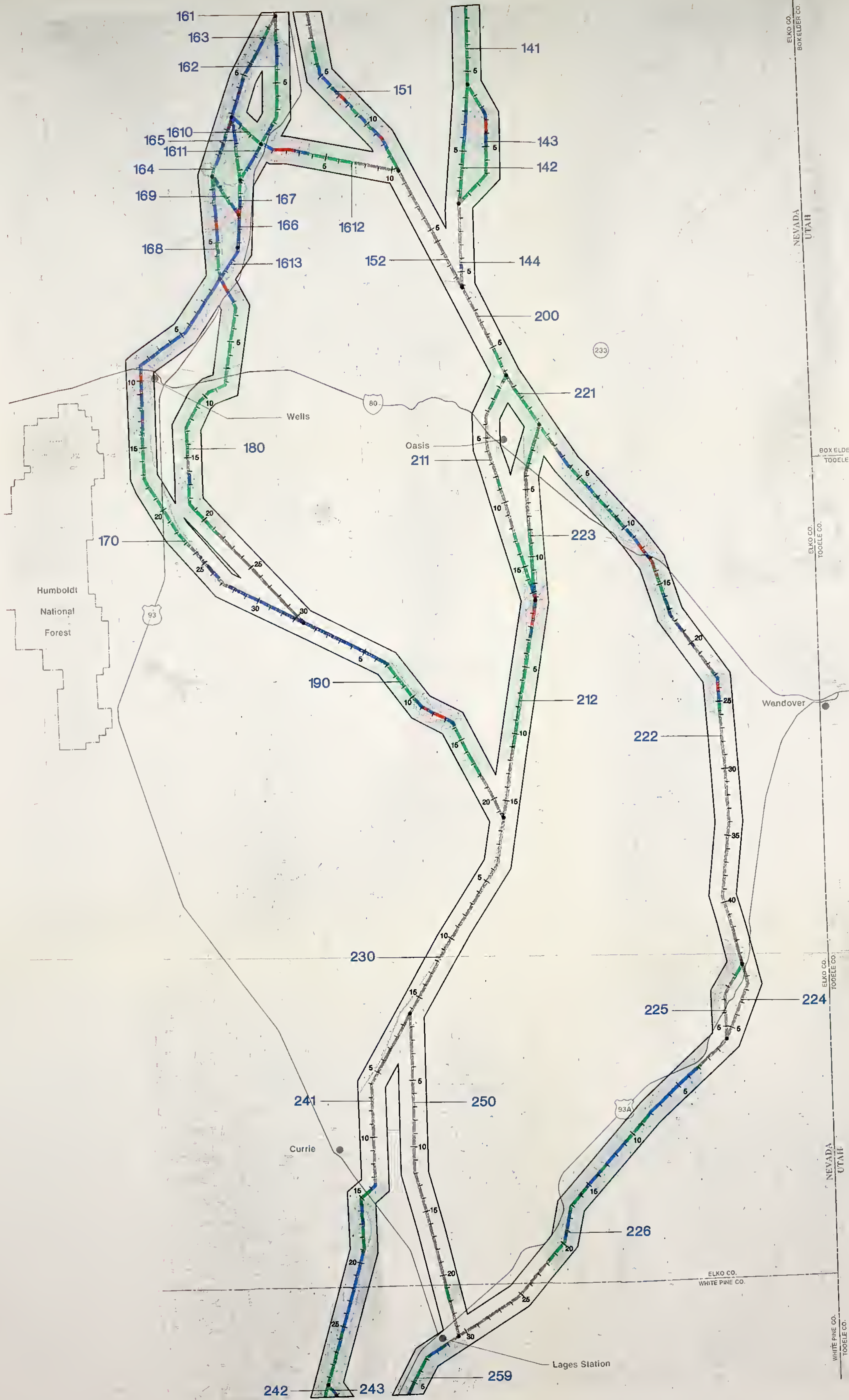


Panel 1 - Cultural Resources

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



CULTURAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

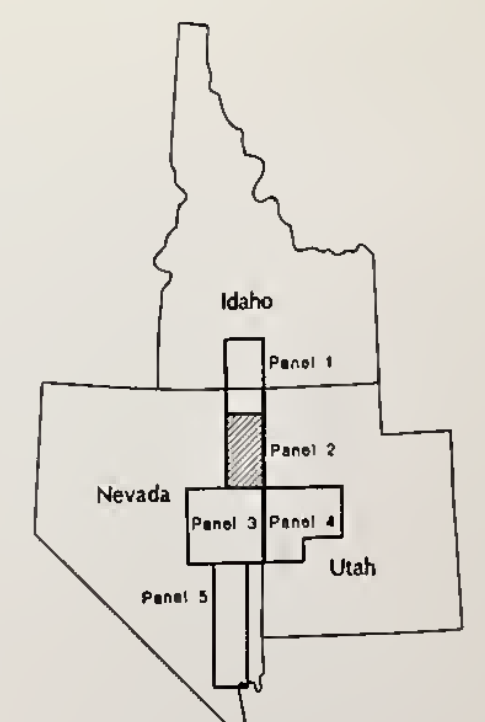
KNOWN RESOURCES & PREDICTED SENSITIVE ZONES

- High
- Moderate
- Low

- 70** Link number
- 15** Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Wells, Double Mountain, Wendover, Elko, & Currie

Map prepared by Dames & Moore

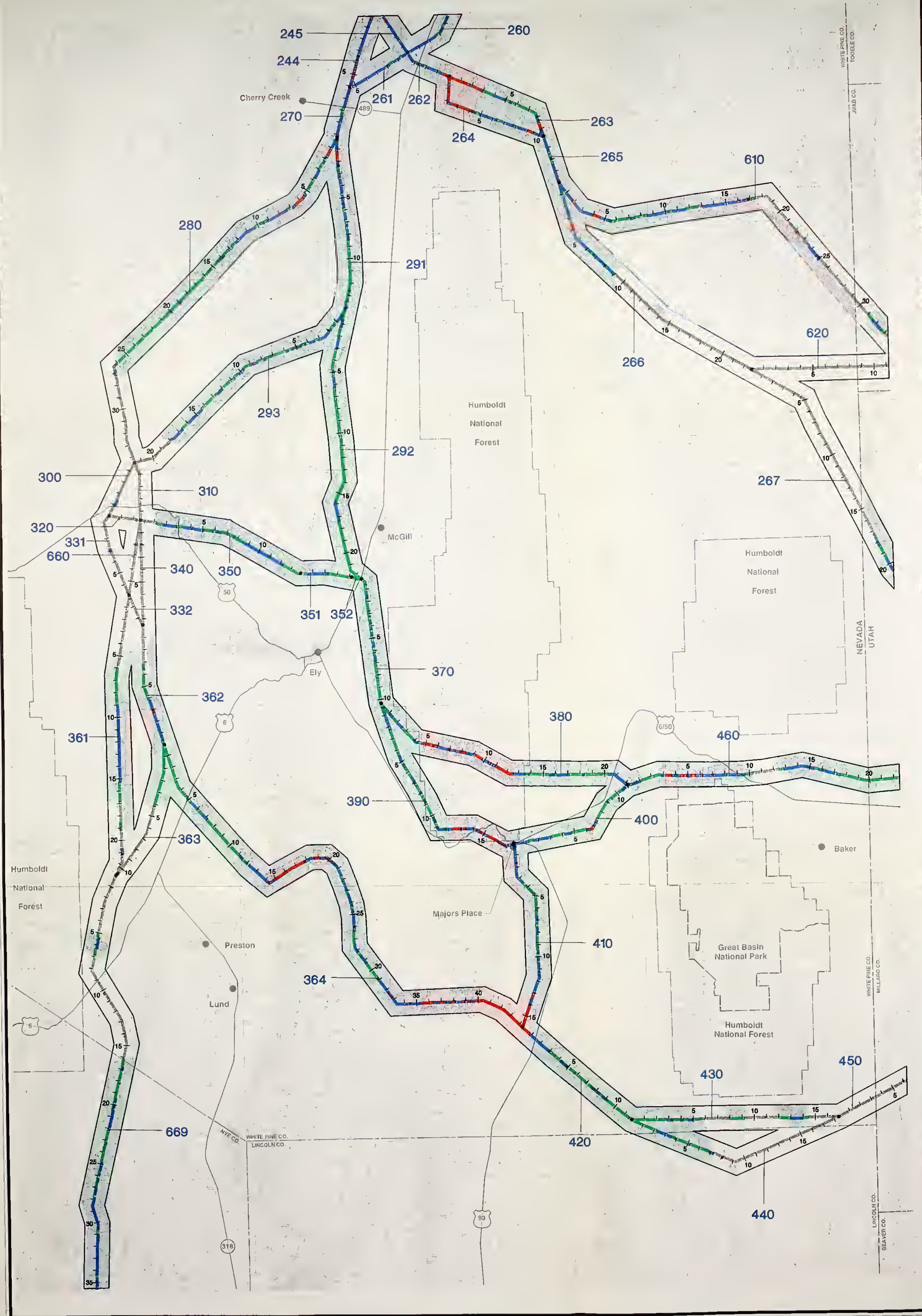


Panel 2 - Cultural Resources

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



CULTURAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

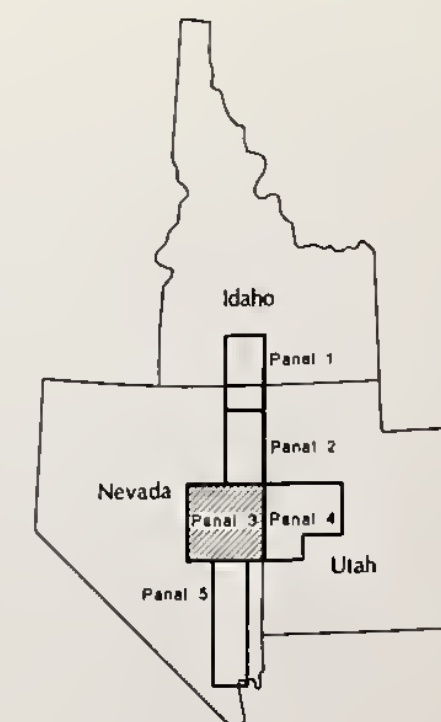
KNOWN RESOURCES & PREDICTED SENSITIVE ZONES

- High
- Moderate
- Low

- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
Nawark Lake, Kern Mountains, Mount Hamilton,
Ely, Duckwater, & Garrison

Map prepared by Damas & Moore

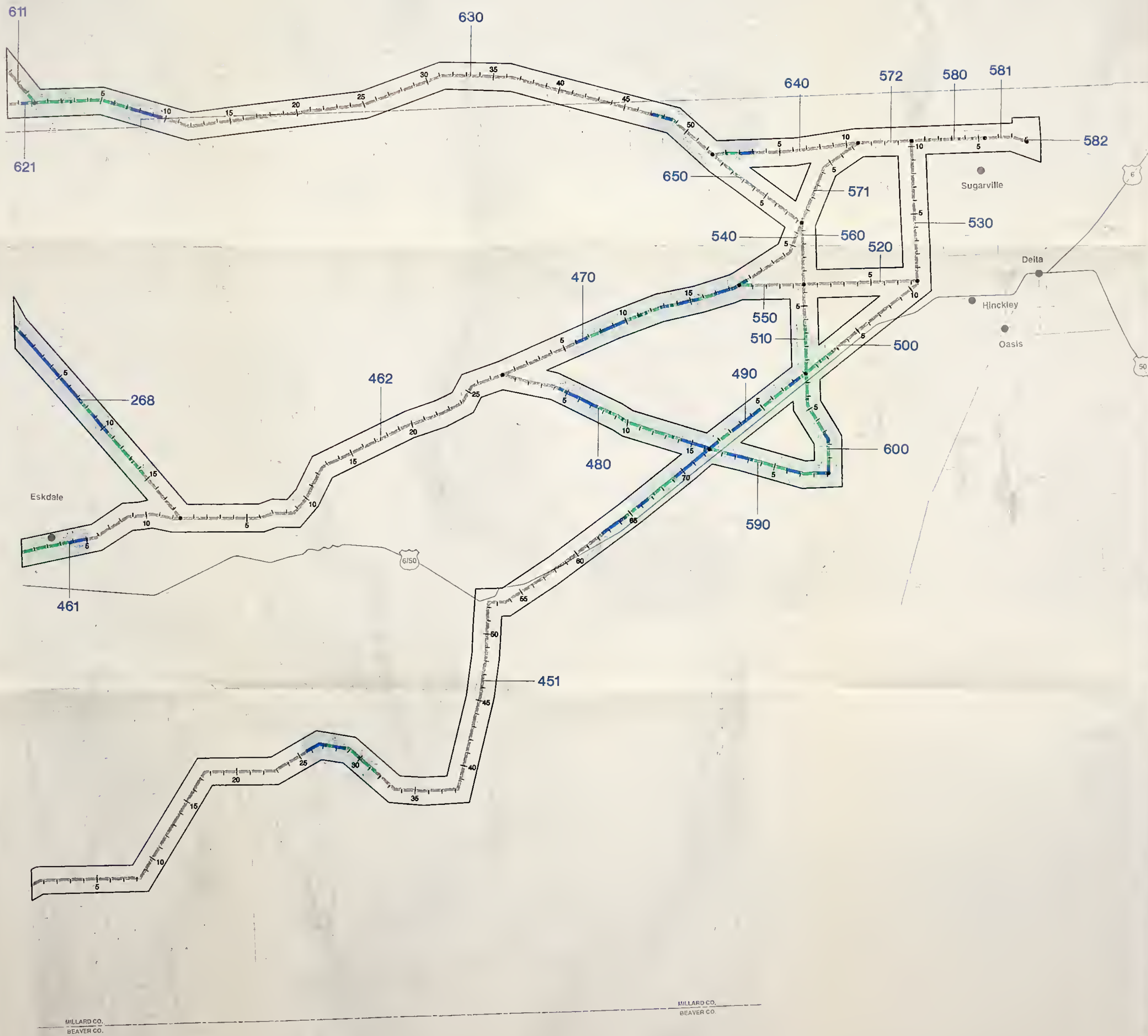


Panel 3 - Cultural Resources

SOUTHWEST INTERTIE PROJECT

Scale 1:250,000

0 5 10 miles



CULTURAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

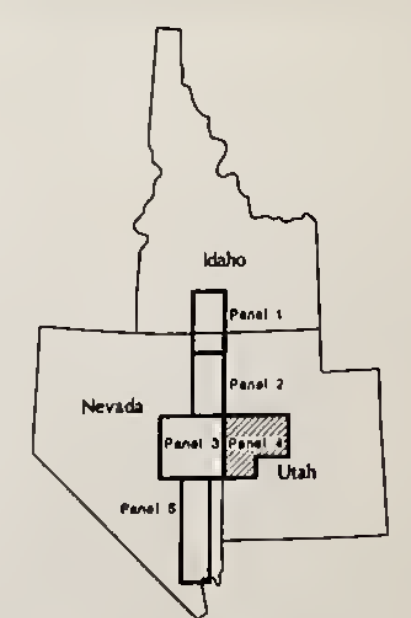
KNOWN RESOURCES & PREDICTED SENSITIVE ZONES

- High
- Moderate
- Low

- 70 Link number
- Junction
- 15 Milepost
- State boundary
- Forest Service boundary
- City, town, or community
- County boundary

Source: USGS 1:100,000 metric series topographic maps
Fish Springs, Lynndyl, Tule Valley, Delta,
& Wah Wah Mountains North

Map prepared by Dames & Moore



Panel 4 - Cultural Resources

SOUTHWEST INTER TIE PROJECT

Scale 1:250,000

0 5 10 miles

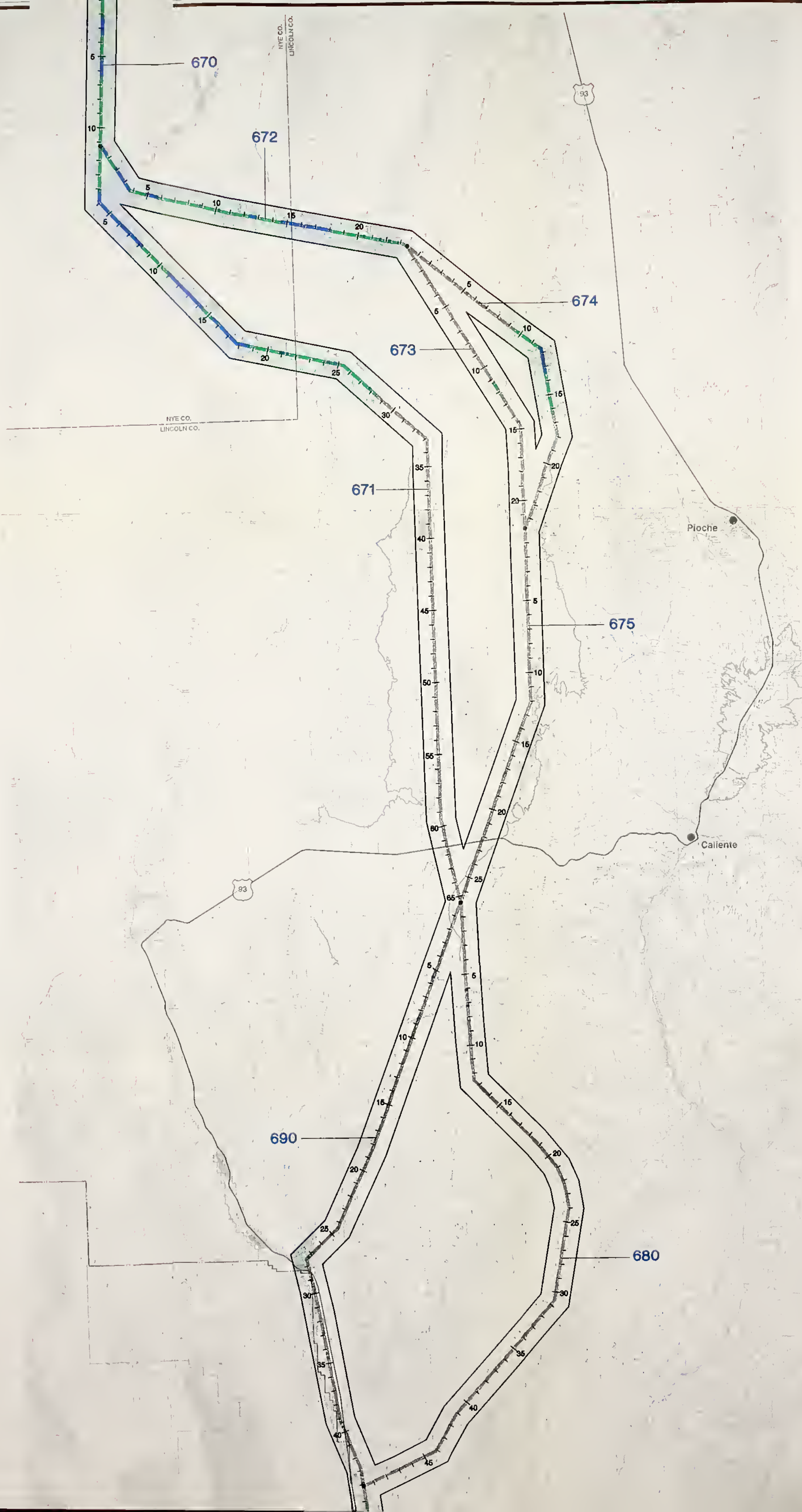
CULTURAL RESOURCES

IMPACT LEVELS

- High
- Moderate
- Low

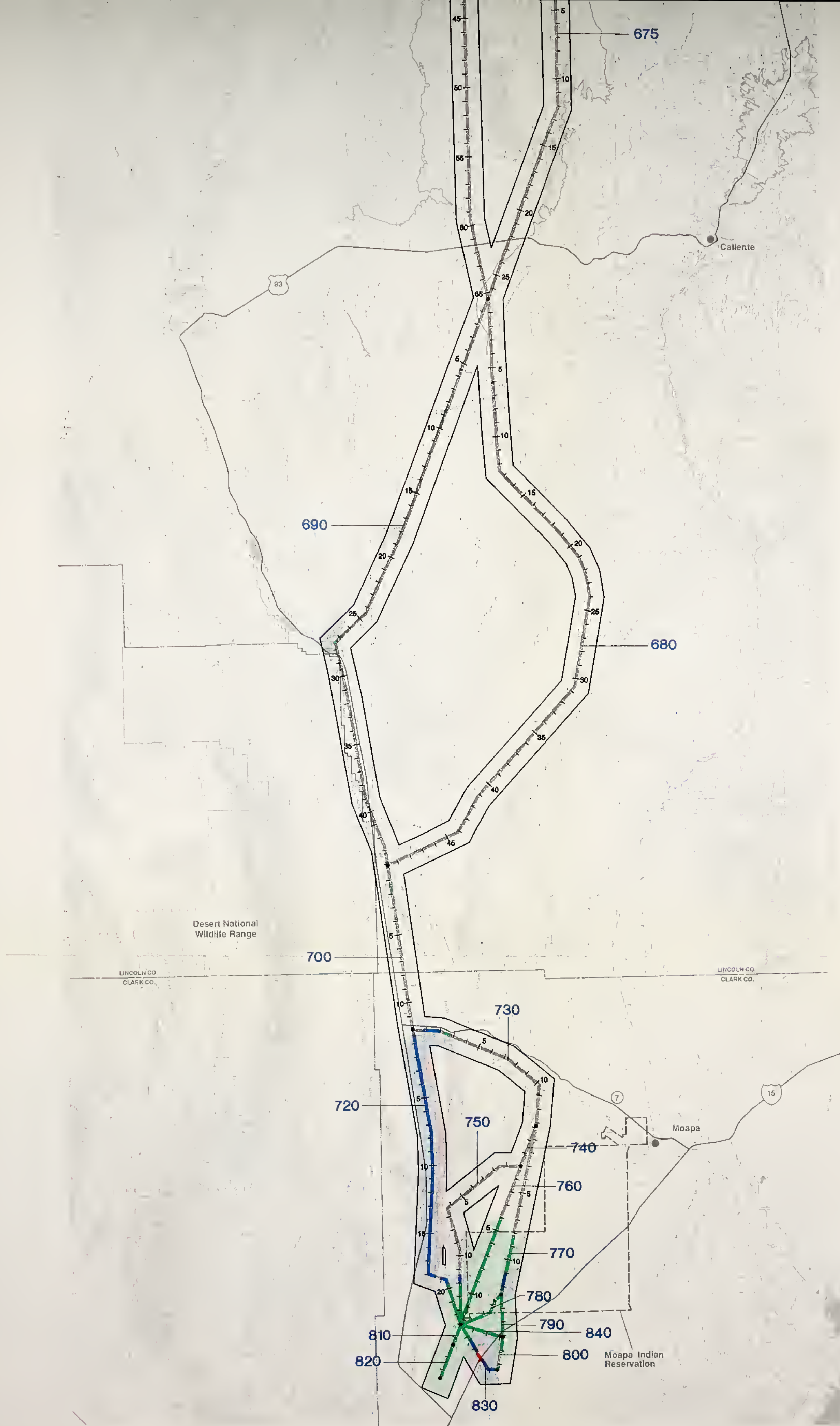
KNOWN RESOURCES & PREDICTED SENSITIVE ZONES

- High
- Moderate
- Low



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

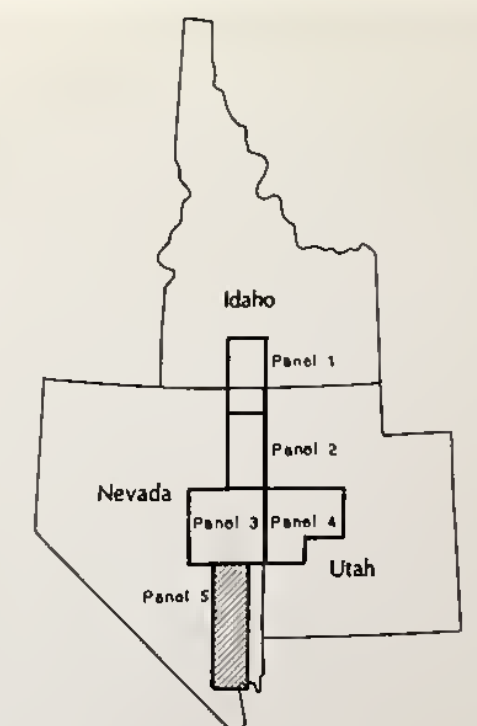
Source: USGS 1:100,000 metric series topographic maps
 Gunn Canyon Range, Wilson Creek Range, Timpahute
 Range, Caliente, Pahreah Range, Clover Mountain



- 70 Link number
- Junction
- 15 Milepost
- County boundary
- State boundary
- Forest Service boundary
- City, town, or community

Source: USGS 1:100,000 metric series topographic maps
 Quinn Canyon Range, Wilson Creek Range, Timpahute Range, Callente, Pahranagat Range, Clover Mountain Indian Springs, Overton, Las Vegas, Lake Mead

Map prepared by Damos & Moore



Panel 5 - Cultural Resources

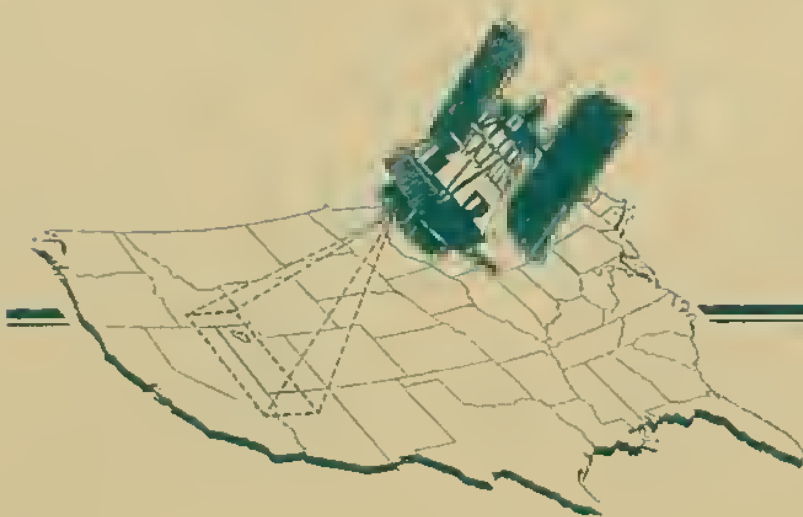


PHOTO SIMULATIONS

PHOTO SIMULATIONS

Simulations are an effective tool for illustrating the potential visual impacts of a proposed project to the concerned agencies and/or the public. They can also be used to evaluate the effectiveness of recommended mitigation. Photo simulations of the Southwest Intertie Project (SWIP) show both important and typical views of the project. The viewpoints for which simulations were prepared include:

- Minidoka Relocation Center National Historic Site - views from a site on the National Register of Historic Places (Link 20), where Americans of Japanese descent were interned during World War II
- Contact - the potential visual effects of the crossing of U.S. Highway 93 (Link 102) by the SWIP parallel to two existing transmission lines north of Contact, Nevada
- Contact to Jackpot - view of the SWIP and two existing transmission lines parallel to U.S. Highway 93 (Link 101) between Contact and Jackpot, Nevada
- North Steptoe substation site - the view west from U.S. Highway 93 at the alternative substation site in North Steptoe Valley is shown in this simulation
- Cave Lake State Recreation Area - the view of the SWIP crossing of the entrance road (Link 380) into the Cave Lake State Recreation Area (part of the Success Loop, a scenic route)
- Oasis - a view of the proposed SWIP transmission line crossing of Interstate 80 (Link 211) near Oasis, Nevada, where the BLM has designated a low visibility corridor
- Lake Valley Summit - the view from a proposed interpretive site for Great Basin National Park on Utah State Highway 21 (Link 451)
- Sacramento Pass - two photosimulations were prepared for this viewpoint illustrating the effects of self-supporting steel lattice towers and H-frame towers to views of Wheeler Peak from U.S. Highway 6/50 (Link 460)
- Bristol Wells - the view of the proposed SWIP transmission line from Bristol Wells (Link 674), a site on the National Register of Historic Places.

These photo simulations were created using a combination of computer drawing techniques and hand rendering. Accurate perspective drawings of the proposed transmission line were completed using a computer. These drawings were combined with a three-dimensional model of the topography of the landscape (also by computer) to create an accurate representation of the scale and perspective of the transmission line as it would be seen from the viewpoint. The composite drawings guided the rendering of the transmission line and the physical changes in the landscape directly onto the photograph of a view. Renderings, using fine brushes, ink, pencils, and airbrush, created the "realistic" representations of features and elements in their respective colors, texture, lighting, and visual elements.



Prepared by: Dames & Moore

Southwest Intertie Project

MINIDOKA RELOCATION CENTER
View from site on the
National Register of Historic Places
EXISTING CONDITIONS



Prepared by: Dames & Moore

Southwest Intertie Project

MINIDOKA RELOCATION CENTER
View from site on the
National Register of Historic Places
SIMULATION



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CONTACT, NEVADA
Crossing of U.S. Highway 93

Southwest Intertie Project

EXISTING CONDITIONS



Prepared by: Dames & Moore

CONTACT, NEVADA
Crossing of U.S. Highway 93

Southwest Intertie Project

EXISTING CONDITIONS



Prepared by: Dames & Moore

CONTACT, NEVADA
Crossing of U.S. Highway 93

Southwest Intertie Project

SIMULATION



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CONTACT to JACKPOT
View North from U.S. Highway 93

Southwest Intertie Project

EXISTING CONDITIONS



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CONTACT to JACKPOT
View North from U.S. Highway 93

Southwest Intertie Project

SIMULATION



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NORTH STEPTOE SUBSTATION SITE
View from U.S. Highway 93

Southwest Intertie Project

EXISTING CONDITIONS



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NORTH STEPTOE SUBSTATION SITE
View from U.S. Highway 93

Southwest Intertie Project

SIMULATION



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CAVE LAKE STATE RECREATION AREA
Crossing of Entry Road

Southwest Intertie Project

EXISTING CONDITIONS



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CAVE LAKE STATE RECREATION AREA
Crossing of Entry Road

Southwest Intertie Project

SIMULATION



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Southwest Intertie Project

LAKE VALLEY SUMMIT
Alternative Great Basin National Park Interpretive Site
(State Highway 21)

EXISTING CONDITIONS



Prepared by: Dames & Moore

LAKE VALLEY SUMMIT
Alternative Great Basin National Park Interpretive Site
(State Highway 21)

Southwest Intertie Project

SIMULATION



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OASIS
Crossing of Interstate 80

Southwest Intertie Project

EXISTING CONDITIONS



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Southwest Intertie Project

OASIS
Crossing of Interstate 80
SIMULATION
Self Supporting Steel Lattice



Prepared by: Dames & Moore

OASIS
Crossing of Interstate 80

Southwest Intertie Project

SIMULATION



Prepared by: Dames & Moore

SACRAMENTO PASS
View South from U.S. Highway 93

Southwest Intertie Project

EXISTING CONDITIONS



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SACRAMENTO PASS
View South from U.S. Highway 93

Southwest Intertie Project

SIMULATION



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SACRAMENTO PASS

View South from U.S. Highway 93

SIMULATION

Southwest Intertie Project



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Southwest Intertie Project

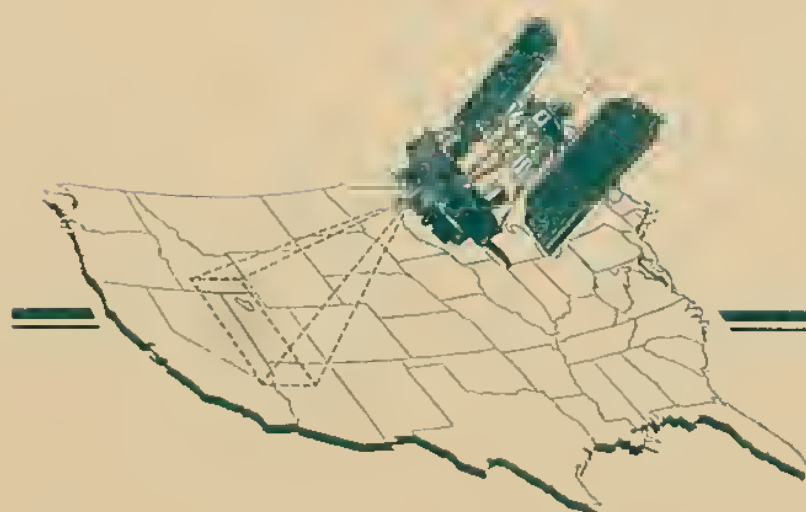
BRISTOL WELLS
View from Site on the
National Register of Historic Places
EXISTING CONDITIONS



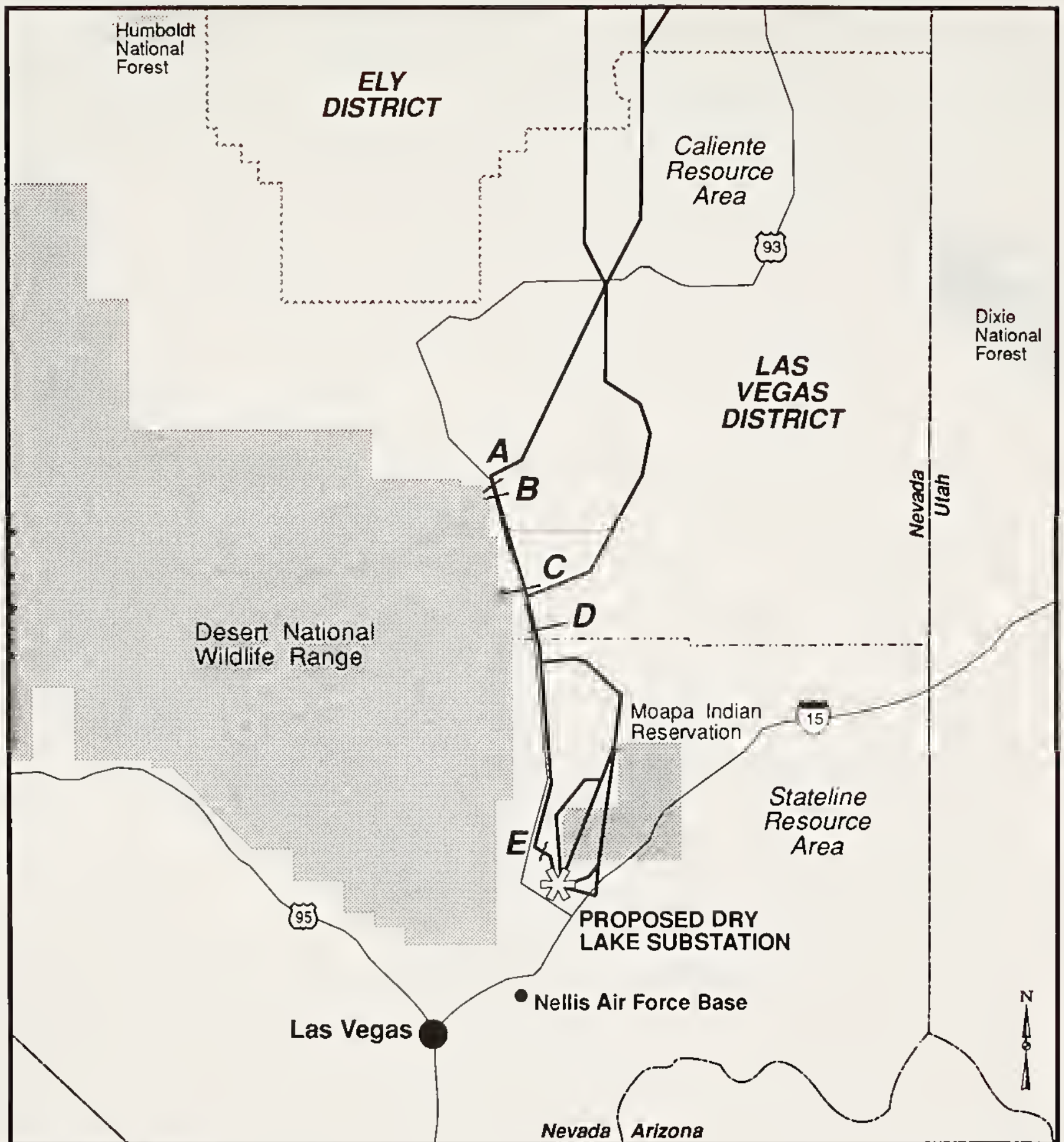
Prepared by: Dames & Moore

BRISTOL WELLS
View from Site on the
National Register of Historic Places
SIMULATION

Southwest Intertie Project



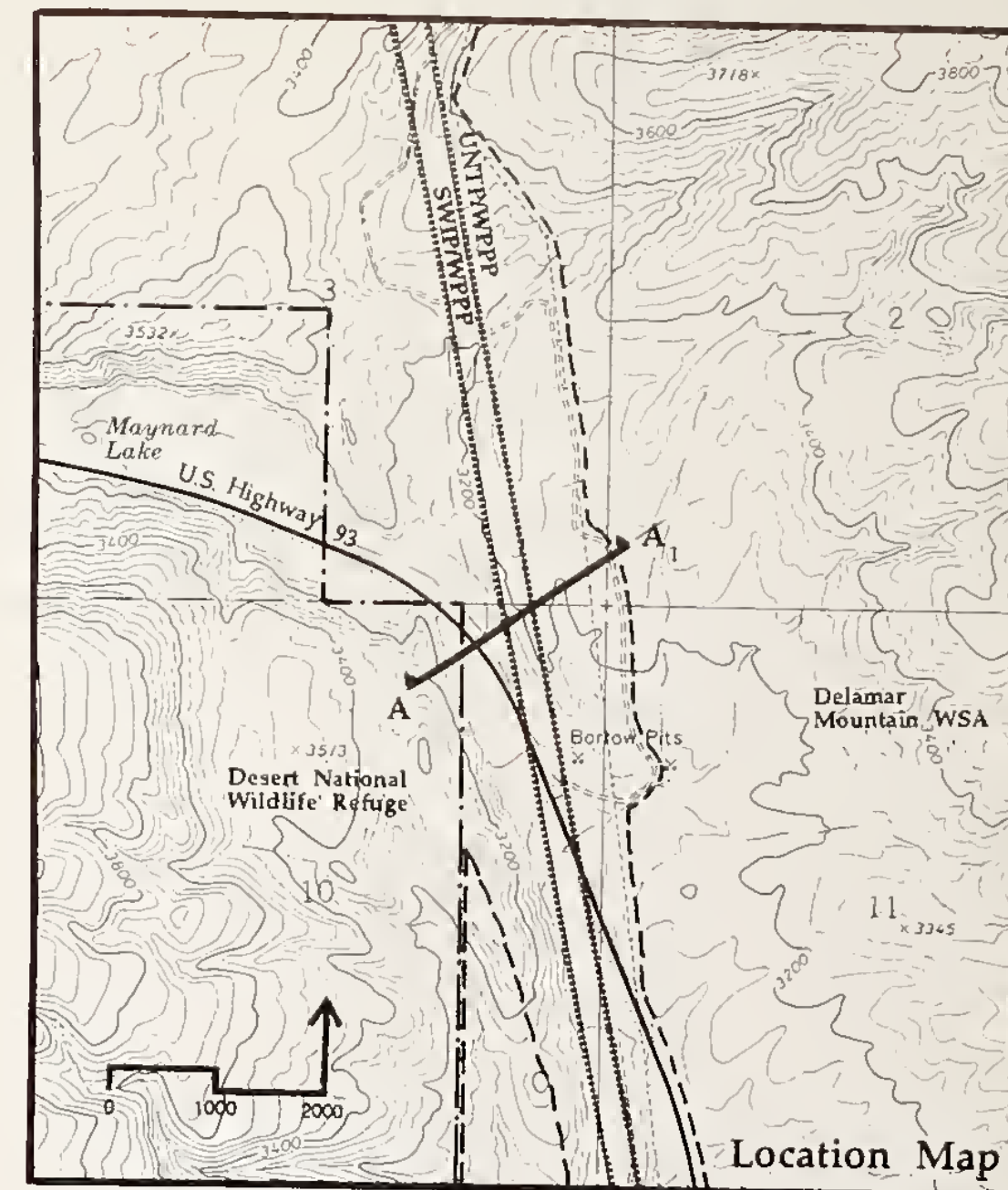
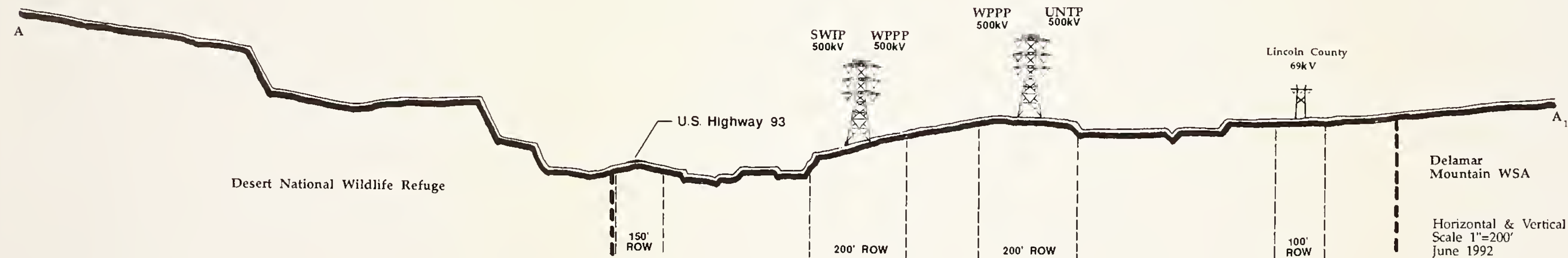
CROSS SECTIONS



Source: Dames & Moore

Note: Not to scale

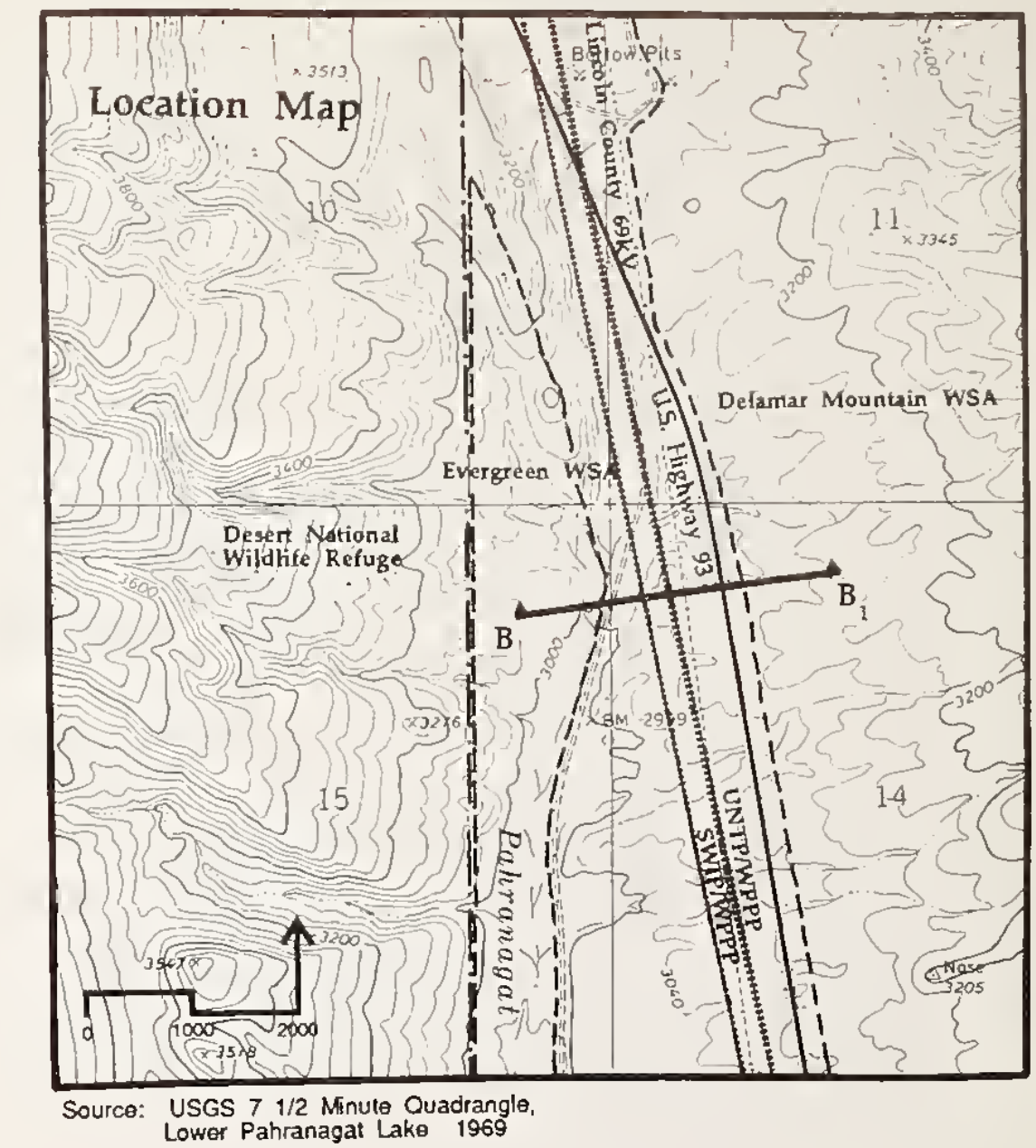
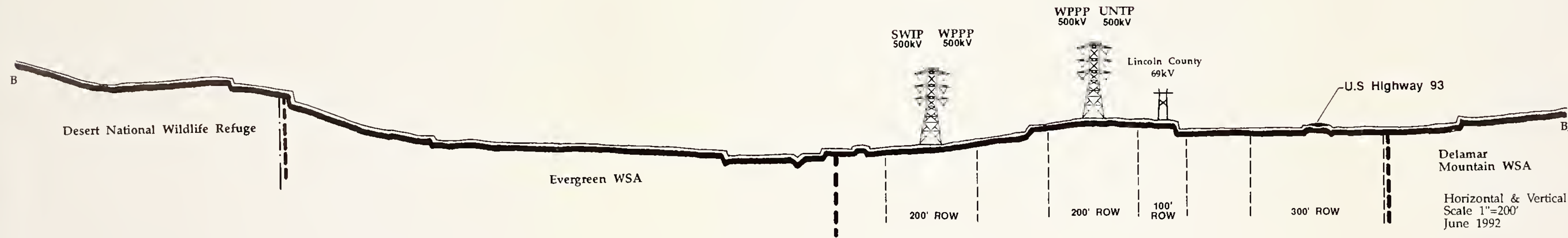
Cross Section Index



Source: USGS 7 1/2 Minute Quadrangle,
Lower Pahrana Lake 1969

Note: This diagram is for illustration purposes only.

Prepared by: Dames & Moore

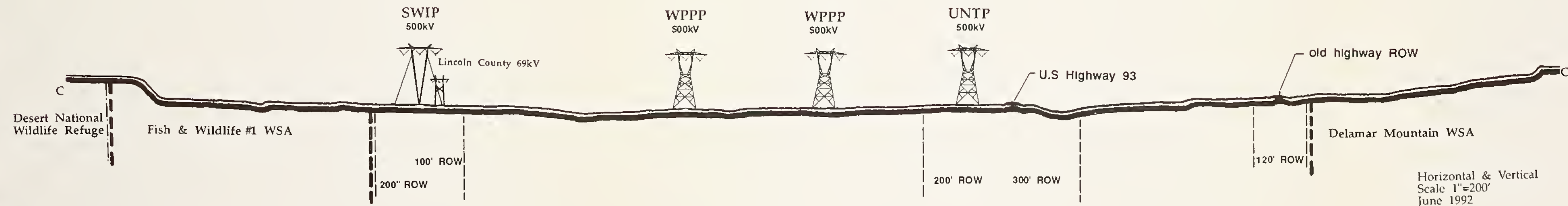


Note: This diagram is for illustration purposes only.

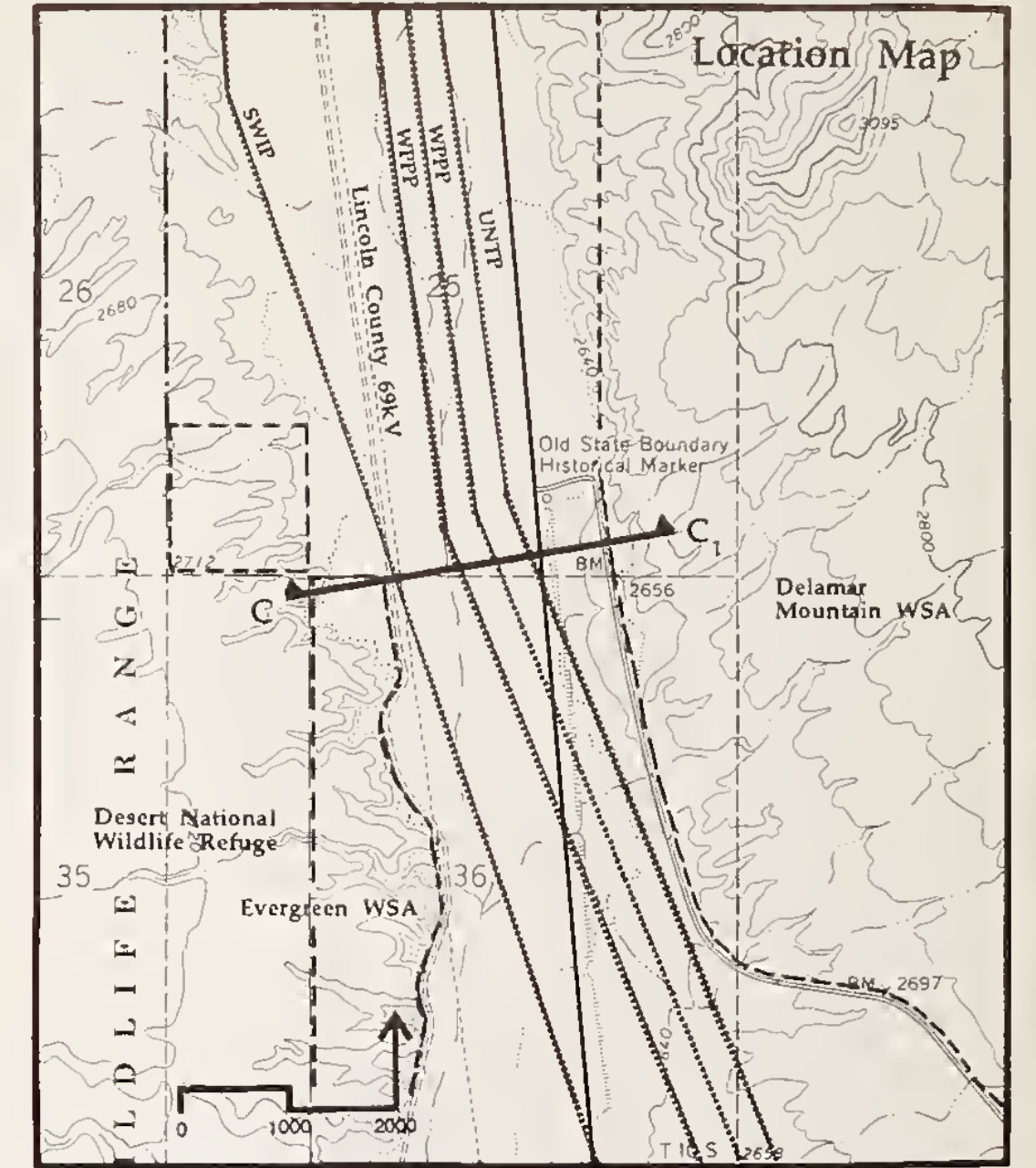
Prepared by: Dames & Moore

Southwest Intertie Project

Pahrnagat Wash
Foreseeable Corridor Buildout
SECTION B



Horizontal & Vertical
Scale 1"=200'
June 1992



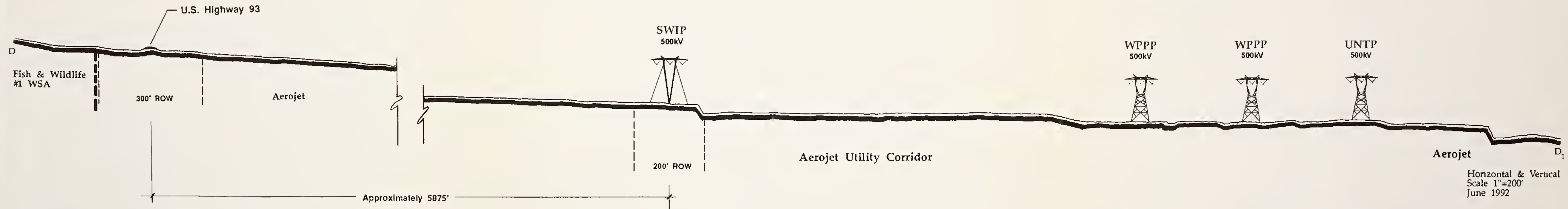
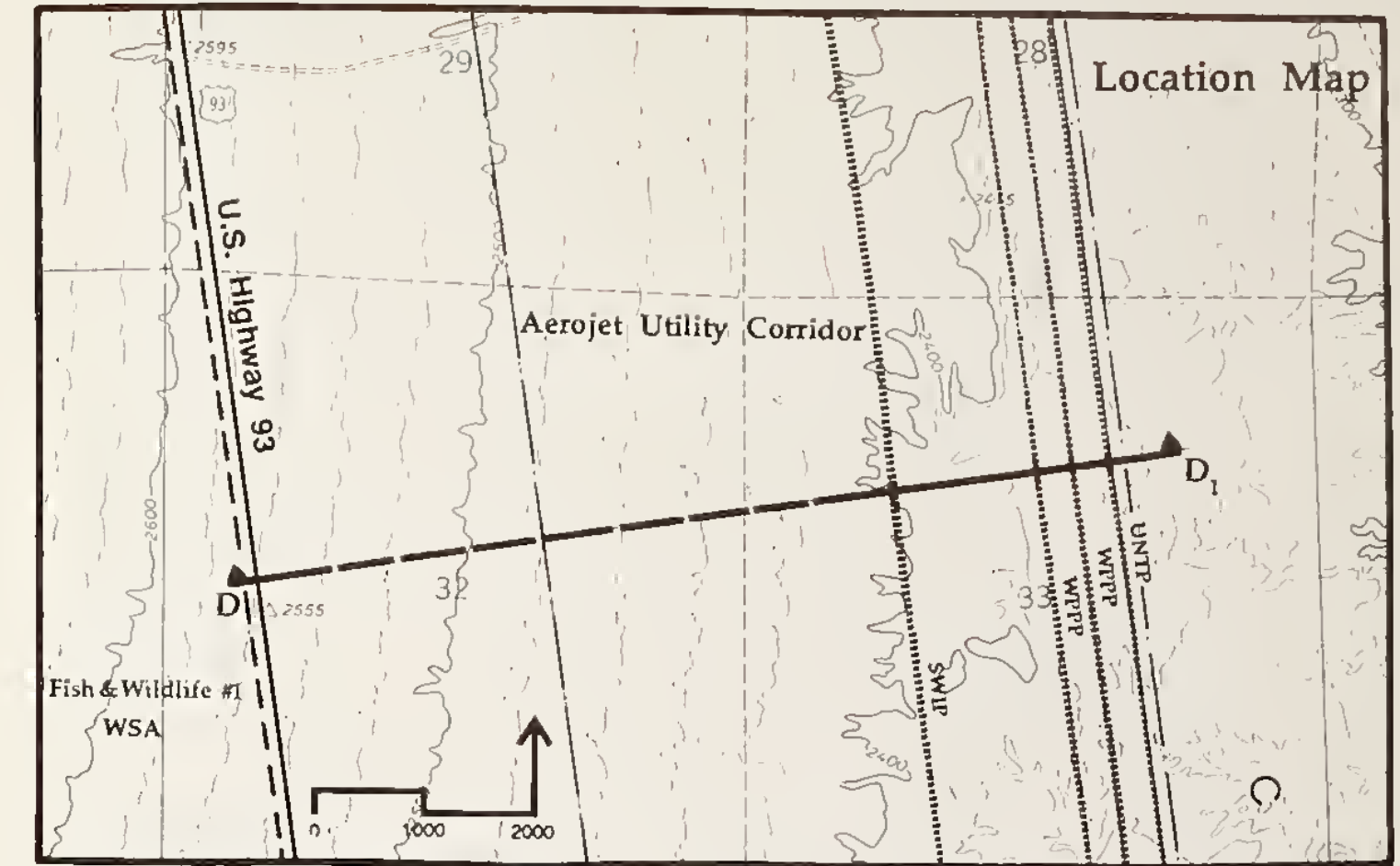
Source: USGS 7 1/2 Minute Quadrangle,
Delamar 3 SW 1980

Note: This diagram is for illustration purposes only.

Prepared by: Dames & Moore

Southwest Intertie Project

Pahranagat Wash
Foreseeable Corridor Buildout
SECTION C

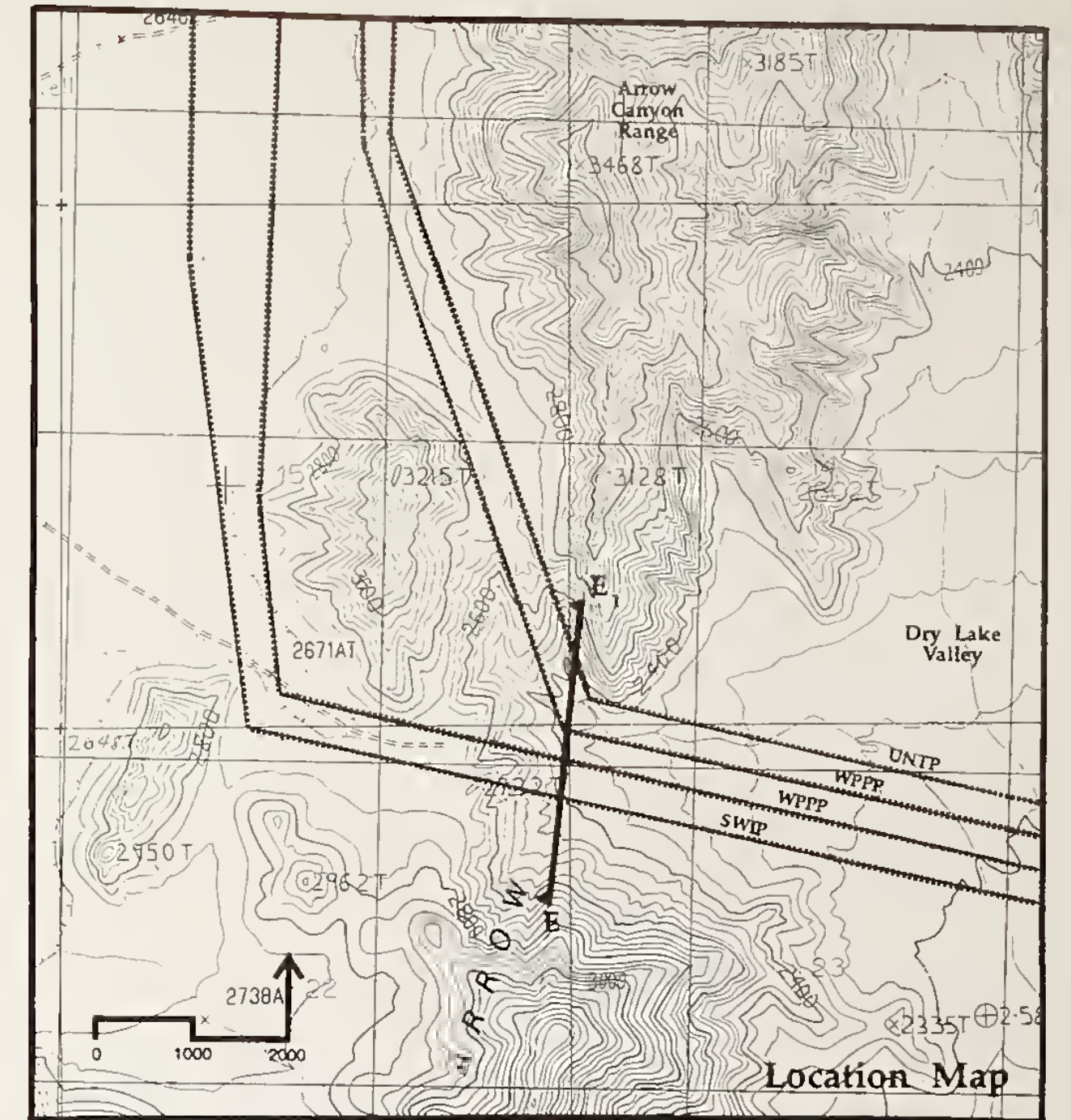
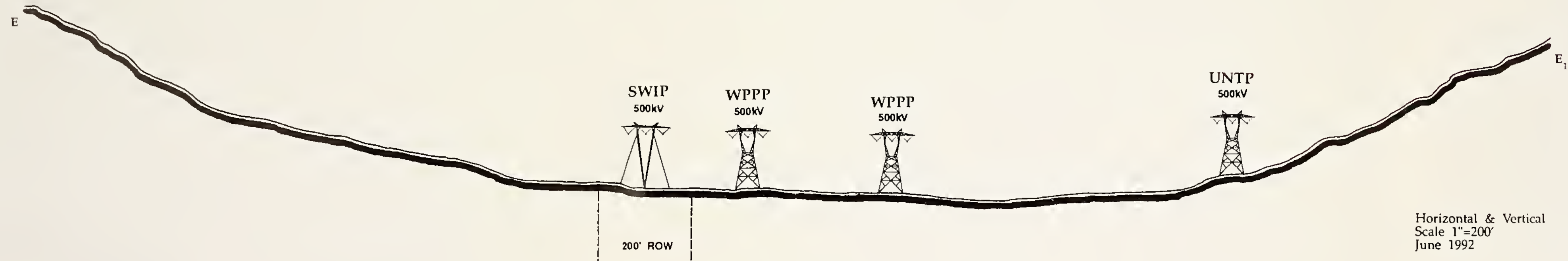


Note: This diagram is for illustration purposes only.

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Southwest Intertie Project

Aerojet Corridor
Foreseeable Corridor Buildout
SECTION D



Source: USGS 7 1/2 Minute Quadrangle,
Arrow Canyon SW 1986

Note: This diagram is for illustration purposes only.

Prepared by: Dames & Moore

Southwest Intertie Project

Crossing into Dry Lake Valley
Foreseeable Corridor Buildout
SECTION E

BLM/USFWS
RS 100-3-00-50
DENVER FEDERAL CENTER
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00225